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ABSTRACT

This report presents the findings and recommendations of Botswana's National Commission on Education, based on the commission's 15-month review of Botswana's education system and its goals and major problems. The commission conducted its study from January 1976 through March 1977 and gathered information through personal visits and consultations with groups and individuals throughout Botswana, through invited written submissions from organizations and the general public, and through the work of investigative task forces composed of local teachers, educational administrators, and personnel within the Ministry of Education. The commission's overall finding was that while education in Botswana has grown dramatically in terms of quantity and scale since independence, the nature of education has changed little, and it is widely believed that the quality of education has actually declined. Major sections of the report focus in turn on educational problems and issues in Botswana, educational goals, strategy for educational development, primary education as a national priority, secondary education, teachers and teacher education, nonformal education, educational administration and planning, and implementation of the commission's recommendations. (JG)

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Kagisano ka Thuto

EDUCATION FOR KAGISANO

REPORT OF THE NATIONAL COMMISSION ON EDUCATION

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Lore lo ojwa lo sa le metse.

Tswana proverb

Gaborone, BOTSWANA

April, 1977

His Excellency the President
Sir Seretse Khama, K.B.E., LL D., M.P.
President of the Republic of Botswana
GABORONE.

Your Excellency:

We were appointed as Botswana's National Commission on Education in December, 1975 and began our work in January, 1976. As our Terms of Reference make clear, we were asked to conduct a broad-ranging review of Botswana's education system, its goals and major problems, and to submit recommendations for improvements in education.

We have met in Plenary Session five times during the past fifteen months and have gathered information through a variety of means, including visits to every District in Botswana to receive evidence and observe the education system in operation. We are grateful to the many individuals who have provided evidence on which we have based our report.

In view of the importance we attach to Botswana's National Principles, we have titled the report Education for Kagisano. We now respectfully submit the report for your consideration.

We have the honour to be,

Sir,

Yours faithfully,

------------------, CHAIRMAN
Torsten Husén

Aklilu Habte
Aklilu Habte

James R. Sheffield
J.R. Sheffield

N.O.H. Setidisho

[illegible].C. Thema

P.R.C. Williams

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FOREWORD

In the ten years since Botswana gained Independence, the face of the country has changed. The frail-looking new state that was born in September, 1966 has steadily grown in strength and stature. Today Botswana is respected for her steadfast rejection of racialism of any kind; for her adherence to a democratic form of society in which all may express their opinions freely; for her vigorous economic growth which has brought unprecedented prosperity. New towns and new industries have appeared; the furthest parts of the country have been brought closer together by improved road, air and telecommunication links; basic services like water, power and health facilities have been extended to more and more communities. Great strides in staffing the public service with Botswana citizens, and significant beginnings in localising other sectors, have been made.

Education has grown dramatically since Independence, as recorded throughout this Report. Indeed, in terms of quantity and scale -- number of pupils, teachers and schools— the education system is far larger than the one that Botswana inherited in 1966. The extent of the neglect of Botswana's human resources in colonial times has only been made fully evident by the critical manpower shortage during the first decade of nationhood and by the spectacular growth of education since then. The rapid development of education has been made possible by the hard work and sacrifice of parents, teachers and Government. It has been a tremendous achievement to make schooling accessible to so many young Batswana in so short a time.

Education may have grown much, but it has changed little. Society and the economy have evolved in new directions, making fresh demands in terms of attitudes, skills and abilities; but the education system has been slow to respond, and at times has actually seemed to be obstructing progressive development in other spheres of national life in Botswana. Equally serious, it is widely believed that the quality of education as measured by the traditional yardstick of ability to read and write and calculate, and of personal behaviour and moral standards, has actually declined. Research undertaken for the Commission confirms that qualitative standards are low. Despite some interesting and exciting innovations, education generally has failed to satisfy the hopes of Batswana. Such at least is the message the National Commission on Education has clearly been given in the written evidence submitted to it, and in the meetings held with interested groups throughout the country. Indeed the growing sense of dissatisfaction and frustration, and the widespread feeling that it was time to take a new look at the provision of education in Botswana, were perhaps the very reasons that the Commission was established.

The National Commission on Education came into being by directive of His Excellency the President of Botswana, Sir Seretse Khama in January 1976. It was requested to report its findings and recommendations to the Government within a year of appointment. The membership of the Commission comprised the following:

Professor Torsten Husen,	Director, Institute for International Education, University of Stockholm, (Chairman)
Dr. Aklilu Habte,	Minister of Culture, Sports and Youth Affairs, Ethiopia;
Dr. N.O.H. Setidisho,	Rector, University College of Botswana and Swaziland;
Dr. James R. Sheffield,	Director of International Studies, Teachers College, Columbia University;
The Honourable B.C. Thema,	Member of Parliament;
Mr. Peter R.C. Williams,	Lecturer, Institute of Education, University of London.

The participation of individual members of the Commission was made possible by the generous assistance and cooperation of the Botswana Government, Ford Foundation, Rockefeller Brothers Fund, African-American Institute, United Kingdom Ministry of Overseas Development, United Nations Development Programme/UNESCO and by the universities and governments that permitted the members to devote their time to the Commission's work.

The terms of reference of the Commission, as proposed by the Cabinet and refined by the National Committee on Education Policy, were as follows:-

1.0 Purpose of the Commission

1.1 To identify the major problems affecting education in Botswana and the issues of principal concern to the Government of Botswana;

1.2 To clarify the goals of the education system as perceived by key parties within and outside government;

1.3 To review the current education system and proposed programme for its development; and

1.4 To present recommendations regarding implementation of an effective programme to overcome problems and achieve goals.

2.0 Scope

The Commission will address the following components of Botswana's education system:

2.1 Primary education;

2.2 Secondary education, essentially public education but including private schools and continuation classes as they affect public policy;

2.3 Vocational and technical education, essentially focussing upon programmes operated by the Ministry of Education but taking account of other vocational and technical education activities of government and parastatal agencies;

2.4 Teacher training, at three levels including teacher training colleges, and ATC and degree level training at UBS;

2.5 Nonformal education, including activities of a nonformal nature carried out by departments and agencies of the Ministry of Education as well as other nonformal education programmes conducted by other ministries;

2.6 Educational testing as it relates to the subjects addressed above;

2.7 Higher education, other than teacher training, will not be within the Commission's scope, but will be considered as it relates to outputs of the secondary level and their opportunities and needs for tertiary education.

3.0 Substantive Areas to be Addressed

3.1 Quantitative expansion of the education system at all levels in relation to manpower and social needs and financial ability of the Government to support continued expansion, including importantly the strategy and structure of quantitative expansion most appropriate for Botswana;

3.2 Content of formal education -- curricula and syllabi -- and changes in content to produce more appropriate and relevant education, at both the primary and secondary levels;

3.3 Qualitative strengthening of the education system, including pre-service and in-service training of teachers, and other approaches to qualitative improvement;

3.4 Nonformal eucation and its role in Botswana;

3.5 Approaches -- formal and nonformal -- to dealing with the problem of out-of-school youth;

3.6 Vocational and technical education and their relationship to other components of the education system and to needs for skilled persons;

3.7 Educational testing and its relationship to the goals and strategy of educational development and the qualitative improvement of the system;

3.8 The costs of education, approaches to maximising cost-effectiveness, and the ability to finance educational expansion; and

3.9 Organisational structure and administrative procedures within the sector as these affect the successful implementation of on-going programmes and proposed reforms.

The Commission's collective exposure to Botswana was gained in a number of ways. The Chairman visited Botswana in December, 1975 for preliminary meetings and discussions of the terms of reference. The Commission then held plenary meetings in Gaborone in January, March and June 1976. Further full sessions to draft the report took place in Europe in September, 1976 and in Gaborone during January of 1977. Two of our members and the Secretariat have been in Botswana throughout the year and the Commission members based outside the country have paid further individual visits.

In announcing the Government's intention to form a National Commission on Education, the Minister of Education, the Honourable K.P. Morake, M.P., told Parliament on 19 March 1975, that he hoped to see the Report of the Commission as a reflection of the nation's thinking and therefore a summary of the nation's aspirations. With this thought very much in mind, we decided at an early date to employ three methods of inquiry that would bring the fullest possible expressions of national opinions to the Commission's attention. The members of the Commission

1. conducted personal visits and consultations with groups and individuals throughout the country,
2. requested the appointment of investigative task forces composed of local teachers, administrators and personnel within the Ministry to review the primary and secondary curricula, and
3. invited written submissions of opinion from organisations and the general public.

On the occasion of the plenary meetings, we took the opportunity to travel throughout Botswana, in order to see schools and training programmes firsthand and to hear the views of those responsible for and interested in the development of education in the country. In all nine districts and the four municipalities, we held discussions with representatives of local councils, their education committees, and the district administration. Members of the Commission also visited the three teacher training colleges and every public sector secondary school; many primary schools and private secondary schools; the main vocational training institutions; the Botswana campus of the University of Botswana and Swaziland; and a great variety of out-of-school education and training programmes, including many of the brigades.

Consultations were held with Ministers and Members of Parliament, Government officials at all levels in numerous sectors, the professional staff in the Ministry of Education, teachers, administrators, students, employers and with several religious and voluntary bodies. A list of the institutions visited in the Districts as well as in Gaborone is appended to our Report.

We were particularly anxious not only to observe and listen to others, but also to involve educators in Botswana in our actual work. Accordingly, the Commission invited the Ministry to form two panels on the primary and secondary school curriculum. These Task Forces produced comprehensive reports which became the basis of further consultations between the members of the panels and the Commission. We found the work of the Task Forces so valuable that, with the agreement of the persons concerned, we have arranged to publish the papers as annexes to the present Report.

In an effort to attend to the widest possible range of opinions within the country, the Commission invited members of the public and organisations of all kinds to submit their views on what the goals and objectives of education in Botswana should be, and on ways to improve the system. The response was so extensive and enthusiastic that the original time limit was extended to enable more submissions to be received. In all, over 90 written statements were sent to us, and the authors are listed in an appendix.

We sincerely thank those who took time to share their views and experience with us, by meeting with the Commission, participating in the Task Forces, or by putting their thoughts on paper.
We regret that we are unable to express our gratitude in person to each individual and group who contributed to our study, but hope that they will recognise our deep appreciation because so much of their thinking is reflected in our Report.

We commissioned a number of special research projects to lend further depth to our investigations. The first major project undertaken was an evaluation of school achievement at Standard 7, Form III and Form V, according to procedures established by the International Association for the Evaluation of Educational Achievement (IEA). Financial support for this research was generously provided by the Swedish International Development Authority and its Agency for Research Cooperation with Developing Countries (SAREC), and by the Ford Foundation. Mr. Kimmo Leimu of Finland served as consultant on the design and administration of the survey. The Regional Testing Centre in Gaborone gathered the field data for the study. Data processing and statistical analysis were performed at the Institute for International Education at the University of Stockholm. This research was undertaken with great dispatch and provided much useful information. Special thanks are due to all parties who assisted in the financing and implementation of the survey, and particularly to Dr. Ingrid Mattsson of the Stockholm Institute. The Chairman of the Commission has supervised the survey and prepared the summary report that appears as Annex I to our main report.

Second, we were fortunate to have the services of a consultant, Mr. H.C.A. Somerset of the Institute of Development Studies at the University of Nairobi, who produced a study on the content, organisation and administration of educational testing in Botswana (Annex 2).

We are again indebted to the Ford Foundation for enabling us to draw upon Mr. Somerset's time, as well as that of a third consultant, Dr. H.W. French, formerly Senior Chief Inspector, Department of Education and Science, in England. Dr. French produced a study on vocational and technical education in Botswana (Annex 3). Both of these reports have proved to be of much value to us.

The consultant studies and other papers prepared for the Commission appear as annexes in a companion volume to our main Report. Although there are some points at which our recommendations depart from the findings of the studies and Task Force reports, the Commission endorses their main themes and conclusions and feels that they should be presented in their entirety.

The Institute of Development Management at the University of Botswana and Swaziland undertook an analysis of the spatial allocation of educational resources in the Botswana school system. We would like to record our gratitute to the Director of IDM, to Dr. Neil Campbell and Mr. E.B. Egner, who advised on the study and design, and especially Mr. John Abbott who was the member of the IDM staff most directly involved in the work. Mr. Abbott also undertook valuable studies of secondary school admissions and administration of the bursaries system, again with the kind cooperation of the IDM.

We benefited greatly in having at our disposal three studies especially prepared for the Commission: A Background Paper on the Education System of Botswana by Mr. Dennis Grose, formerly with the Ministry of Education; The Report of the First National Conference on Nonformal Education, which was held in Gaborone, March 26 and 27 1976 and attended by members of the Commission, and A Bibliography *on Education in Botswana and Related Fields*, compiled by Mr. Bernard Weimer of the Documentation Unit of the National Institute for Research in Development and African Studies, University of Botswana and Swaziland.

The Commission was given valuable research assistance by Ms Christine Fallert, who gathered a great deal of the statistical and other evidence on which our conclusions are based, and participated in many aspects of the Commission's work. Her presence was made possible through an internship programme sponsored by the Woodrow Wilson School, Princeton, and the Ford Foundation. Our warm thanks go to her and to those in the various branches of the Government who cooperated with her in providing information and documents which we requested. In this connection, we must mention the staffs of the Ministries of Finance and Development Planning, Local Government and Lands, Agriculture and the Directorate of Personnel, who provided invaluable aid and advice. The education section of the Central Statistics Office assisted us at many stages of our work. The Department of Information Services was extremely helpful in publicising the Commission's request for statements from the public, which produced a gratifying response.

Our Report would not be complete if we failed to express our debt to the Minister of Education Mr. K.P. Morake, to Mr. Bias Mookodi, Permanent Secretary of Education throughout most of the period of the Commission's work, and Mr. David Finlay, the present Permanent Secretary, as well as to all the senior and supporting staff of the Ministry who gave extensively of their time to discuss problems with us and provide information. They were unfailingly courteous as we trespassed on their hospitality by borrowing their offices, using their telephones and drinking their tea.

Lastly, we must say a special word of thanks to our Secretary, Dr. Robert McMeekin, who has arranged and coordinated the Commission's activities in Botswana from before the Commission was convened until completion of our report. He has maintained liaison with Government, directed the research activities of the Secretariat, provided valuable insights during our deliberations, and supervised the preparation of the Report in all its stages. His professional contributions and the hospitality he and his family extended to us during our sessions in Botswana are deeply appreciated.

CHAPTER 1

Education in Botswana: Problems and Issues

1.01 Education is close to the centre of any society's life and concerns, being intimately involved with its culture and values, its political system and its economic arrangements. For this reason a fundamental review of education cannot simply concern itself with the internal working of the school system and such matters as teachers qualifications, the school syllabus or examination results, important as these matters are. One must look more broadly at the role of education in society and at its potential contribution to social welfare and national development.

1.02 In carrying out its first task to identify the major problems and issues affecting education in Botswana, the Commission has therefore found it necessary first of all to review the broad social and economic context in which Botswana's education system operates, and to consider the constraints, problems and challenges which this context -- a rapidly changing context it must be noted -- poses for the education system. Against this background of the linkages between education and the rest of society, we then go on to consider the problems and issues arising within the education system itself.

1.03 Botswana has undergone a faster transformation in the ten years since Independence than most countries have experienced in a quarter century. Eleven years ago the country was a Colonial Protectorate, the economy was stagnant and Gaborone, Selibe-Pikwe and Orapa did not exist. All this has fundamentally changed. Further development and change is inevitable, which poses for education the problem of contributing to cultural continutity while preparing children for a world far different from the one their mothers and fathers grew up in only thirty years ago. Moreover it is certain that a world entirely different from the present awaits today's children by the time they are in middle age. Dramatic political change is taking place on Botswana's borders in Southern Africa, and within her borders urbanisation and industrialisation are changing the face of the economy. So a relevant education for Botswana cannot be one which clings blindly to ancient tradition. It is rather one in which customs are adapted and culture is renewed, enabling the society to respond to new opportunities with confidence.

SOCIETY AND EDUCATION IN BOTSWANA

Physical and Demographic Factors

1.04 With an area of 582,000 sq. km. and a population of only 712,000, Botswana is for the most part an empty country. Large land area, low population, and relatively dispersed settlement patterns give rise to a number of problems and issues in the education sector.

It is difficult and expensive to provide primary schools for very widely scattered populations in remote rural areas because of the problem of gathering sufficient children in one place. Rural children must often walk long distances each day in order to attend school, and many simply do not live within daily walking distance of any school. If schools were located so as to serve the population, they would tend to be too small to take advantage of economies of scale in the provision of teachers, equipment and school libraries. The alternative of providing boarding facilities is expensive.

1.05 Another obvious difficulty in low population density areas is that communications are poor. Mere delivery of basic supplies is often an acute physical problem because transport is difficult to obtain and may break down. Long delays occur and the visits of the District Education Officer or in-service training adviser are infrequent. In such a situation it is essential to have some devolution of authority to those on the spot, for it may take weeks before an urgent enquiry can be transmitted to Gaborone and a reply received.

1.06 The small population of Botswana also means that the market is small, and economies of scale in educational provision are lost. The Botswana education system cannot support specialised courses in all branches, because the country's manpower requirements may be for only a few specialists. Similarly, it is not feasible in some cases to produce equipment, books and materials for Botswana alone. It may often prove more to Botswana's advantage to send small numbers of students abroad for training or to cooperate with others in providing what Botswana needs.

1.07 The rapid population growth of 3 percent per year will create a larger market in Botswana which may in time have advantages. In the short run, however, population growth puts considerable strain on both the economy and the education system. It results in very large numbers of young Batswana in the school system and in search of work, in relation to the number of adult workers who have to support the cost of their schooling and to provide them with work experience. An unbalanced population structure thus creates its own peculiar problems which are quite separate from the question of whether or not Botswana's population is too small or too large in relation to the country's resources.

1.08 Population movement in Botswana is changing the conditions under which many of the people live. At present over eighty percent of the population lives an agrarian life and a very large proportion practices virtual subsistence farming. But modernization, in which education plays a part, is widening people's horizons and making them more mobile. Young Batswana are being drawn away from rural areas toward the large villages and towns, and the growth of urban areas at 12 percent per year is amongst the highest rates on the

Continent of Africa. This creates social and economic problems for the larger population centres. Social infrastructure, including new schools, is more expensive to provide, and resort to community self-help efforts in providing facilities is much less feasible in the towns. Present trends suggest that in spite of Government's efforts to accelerate rural development as many as 45 percent of Batswana may live in communities classified as urban by 1990. This suggests that education to prepare young Batswana for the future must make them adaptable and versatile, able to live in rural or urban areas.

1.09 Traditional patterns of settlement and migration in Botswana differ from those found in other countries, with certain influences on education. Permanent residence has tended to be in the moderate to large sized traditional villages, although increasing numbers of families are either migrating to the towns or in the reverse direction, to live near their grazing or crop-growing areas. Due to Botswana's semi-arid climate, it is often necessary to graze cattle at a remote cattle post where grass and water are more abundant. Similarly crop growing tends to take place at the "lands", which are often far away in another direction. Women in rural families are largely responsible for producing crops, which means that, like the fathers and brothers at the cattle post, many mothers are away from the permanent residence for months at a time. Children may accompany one or other parent, or spend considerable periods in the care of relatives, or else may be alone with no adult care. Many school-going children are thus deprived of the support of their parents and a stable home during their formative years.

1.10 Still another factor is the relatively high proportion of fathers and older brothers who take work in the mines or other jobs in South Africa for extended periods. Many women are in effect the head of household and many children grow up in families with no adult males for much of their early lives, and so are deprived of understanding of the role of men in the family and the community.

Social and Cultural Factors

1.11 For 81 years until 1966 Botswana was the Bechuanaland Protectorate under British rule. Not surprisingly the institutions and culture of the colonial power were imposed on the country. To some extent the indigenous culture became submerged and many Batswana were encouraged to believe that their own cultural inheritance was inferior to that imported by the British. With Independence has come the opportunity to reassess this situation, to reassert the national identity, and to build a society which gives expression to the noblest values from the past. At the same time many imported ideas and cultural borrowings have brought benefit to the country, so that the task for the future is to develop a society which gives expression to the unique character and values of Botswana while taking advantage of useful innovations developed elsewhere.

1.12 In comparison with most African countries, Botswana is culturally homogenous, with approximately 80 percent of the population belonging to the same ethnic and linguistic group. Tribal cleavages are not as serious a problem as in other countries. The Government is committed to the ideal of a democratic, non-racial society. In this important goal Botswana has achieved notable success. Education must reinforce the aim of national unity.

1.13 With the rapid economic and social change of the last few years, however, there is clearly a danger that the unity of the country may be threatened by a new kind of cleavage, on socio-economic lines. Income differentials appear to have widened and those who have moved to the urban areas live a very different kind of life, and enjoy different amenities, from their fellows in the rural areas. Education may become the means not of uniting people but dividing them, with those who have had secondary and higher education forming an elite group increasingly cut off from the mass of the people. The most effective means to prevent this will be through action in the social and economic spheres; but policies for the distribution of educational opportunity are highly relevant and schools can do much to foster social cohesion.

1.14 Language policy in the schools is considerably simplified since such a large portion of the population speak Setswana. English, the second national language, is used as a medium of instruction in the schools from Standard 3 onward. Many teachers are not, however, very proficient in English themselves. The early transition from Setswana to English creates educational and cultural identity problems that are discussed below. In any consideration of language policy, the rights and needs of the linguistic minority groups must be considered carefully, together with educational and national unity factors. The issue of language, although less complex in Botswana than elsewhere, is important and sensitive.

1.15 Language is one means by which cultural identity is strengthened, but education provides other ways to inculcate in every Motswana a sense of pride in and identification with his or her cultural heritage. We have heard criticism of the present education system for failures in this respect. It tends, in the opinion of many observers, to alienate students from their cultural roots and to create, not appreciation of their background, but rather a tendency to look down upon it. The education system should orient young people toward the social, cultural, artistic, political and economic life of their unique society and prepare them to participate proudly in it.

Economic Factors

1.16 Education and the economy are closely interrelated in many ways. Economic development provides the resources to sustain educational growth and creates the opportunities for profitable work. Education supplies the skills and specialised manpower that economic enterprises require, and develops abilities useful to the self-employed in their occupations. At the same time education uses money, manpower and materials which might be devoted to other purposes, and accounts for the biggest share in the national budget. The private costs of education to the parent or student and the income increases it may bring largely determine total demand for schooling and demand from different groups in society. The basing of job recruitment and income differentials on educational qualifications reinforces demand for education and also mean that educational inequities lead directly to social inequalities.

1.17 The outstanding feature of Botswana's recent economic history has been the extraordinarily high rate of economic growth, averaging about 15 percent per year in recent years. National income has increased from P36.8 million in 1966 to an estimated P125 million in 1976 in current prices and income per head from P69 to P325 per year. This has been due to a combination of factors of which the most important are probably mineral discoveries and exploitation, favourable customs arrangements negotiated with Botswana's Southern African neighbours, good rains in the most recent years, and the Government's own economic policies. Although the Fourth National Development Plan (NDP IV) envisages a decrease in the growth rate to about 9 percent per year this is still a high figure and success in maintaining it is a crucial factor in determining the future rate of educational expansion and in providing employment opportunities for school leavers.

1.18 Development expenditure by the Ministry of Education will account for P6.6 million in Financial Year 1977-78, which is equivalent to 10 percent of total Government development expenditure. The Ministry's share of the recurrent budget is 16 percent. If one includes educational expenditures by other agencies, about 19 percent of total public recurrent expenditure and 15 percent of development expenditure is devoted to education. Recurrent expenditure on education is expected to rise to 23 percent by 1980-81. The share of education and training has in fact been growing for a number of reasons. First, enrolments have risen rapidly at all levels, as Table 1.1 shows; second, unit costs have grown as a result of a decrease in pupil-teacher ratios (Table 1.2) at primary level and up-grading of the quality of teachers; third, the proportion of the total enrolled at the more expensive secondary and higher levels has increased; fourth, new services and new education and training programmes have been launched. The factors of cost

Table 1.1

Growth of Total Enrolment, By Level

1966- 1976

	Total Primary Enrolment	Total Secondary Enrolment	University Enrolment (Botswana Campus)*
1966	71 546	1 531	None
1967	71 577	1 854	"
1968	78 963	2 299	"
1969	82 214	3 099	"
1970	83 002	3 905	"
1971	78 442	4 740	42
1972	81 662	5 564	70
1973	95 511	6 152	132
1974	103 711	7 055	201
1975	116 293	8 434	289
1976	125 588	9 558	465

* Refers to the University academic years ending in the year shown.
Source: Education Statistics.

Table 1.2

Recurrent Costs per Student per Year, by Level

1972-1975

(Pula)

	Primary	Secondary*
1972	22	234
1973	22	224
1974	29	260
1975	40	301

* Based upon analysis of expenditures for Secondary schools; excludes some overhead costs not specifically allocated to the secondary level.

Source: National Commission on Education, derived from Education Statistics.

escalation seem likely to continue in force. Although we think that Botswana could contemplate a rise to 25 percent or even 28 percent of its budget for education and training -- particularly in view of the serious past underinvestment in education -- it will be necessary to control costs carefully and avoid waste. The recent increase in public spending for the Police Mobile Unit demonstrates that there will be competing claims for resources. Even if education were of the highest quality, it is obvious that ways should be sought of containing the rise in expenditures per student in total. Maximisation of the contribution of education as an investment involves not only improving the quality of its products but also reducing as far as possible the cost of producing them and employing them.

1.19 From the national point of view, indeed, it would make good sense to reduce the public subsidy to secondary and higher education students and also to reduce the amount of the additional income rewards which higher education qualifications bring to the individual. The low private expenditures and high private benefits should be adjusted to conform more closely with the costs and benefits to the nation.

1.20 The currently high income differentials for people with different levels of educational qualification are a major factor in fuelling demand for education in Botswana. They also largely explain the very great differences in unit cost between the levels of the education system. The average salary of a primary teacher is P1000 per year, of a secondary teacher P2,700 and of a university teacher P5,384 per year. Salaries account for a very high proportion of outlays on education. Moreover high pay for a few well educated Batswana in fact means, because of overall limitation of Government funds, less overall employment for school leavers. It will thus be seen that any moves to strengthen the Government's incomes policy and to reduce differentials between the high- and low-paid, and between wage-earners and non-wage-earners would be beneficial in a number of ways. This would moderate excess demand for education, reduce education costs and increase job opportunities.

1.21 Any move to align private costs (fees) and benefits (incomes) more closely with the national costs and benefits, would however have to take account of the wide income differentials at present existing in Botswana and the existence of large numbers of very poor people. These conditions are found in most developing countries. The poor find it difficult not only to pay school fees but also to bear the cost of loss of services, normally performed by their children, when the children go to school.

1.22 Forty-five percent of the rural population still lives in poverty, subsisting on meagre output from crops and small stock, hunting and food gathering, and transfers in money or in kind from others. Such a standard of living, at or below the minimal level identified as the 'poverty datum line', implies low nutritional levels, poor health care, poor housing, and no cultural amenities. For these families a reduction in school fees from R6.00 to R3.00 per year in 1973 was sufficient to bring about a marked increase in enrolment. Policy on financing education must take into account the very low living standards of a large proportion of the families whose children are served by the education system, and special help may be needed to enable the poor to take advantage of educational opportunities.

1.23 Inequality of income is just one sign that economic growth, though impressive, has been unbalanced, bringing great benefits to some but hardly any to others. The imbalance can also be seen in the disparity in development -- and in educational opportunity -- between the more populated part of the country along the line of rail in the East, and the vast rural hinterland in the Centre and West. These wide differences are a major cause of the population drift from the rural areas. Many people have expressed to the Commission their opinion that education is largely responsible for this drift, and that a different kind of education could stop it. Whatever education's responsibility however it is obvious that the crux of the matter is the economic prospects in the rural areas and the extent to which, in Botswana's ecological conditions, cattle raising and crop farming can be made profitable for the mass of the population. There is little that education can do to counter basic economic forces or to offset the effect of national wage and employment policies. If both of these pull young people to the towns, any educational policy which tried to force young people to remain in the rural areas would be immoral and doomed to failure.

1.24 Nowhere has economic dualism been more apparent than in the sector of employment, and in the paradox of a surplus of primary school leavers unable to find jobs coexisting with a 'manpower shortage' at upper levels. As a matter of fact, the proportion of the labour force in wage employment is already high by comparison with many other countries and has been growing rapidly during the last Plan period. But this growth has been insufficient to absorb all those with primary education seeking jobs. The situation is likely to deteriorate after 1979 when much larger numbers begin to leave primary school. The position is quite different at skilled and professional levels requiring secondary or tertiary education. At this level the job specifications are laid down in terms of qualifications that Batswana do not yet possess. At these levels jobs are 'chasing' people; and because the salary structure is skewed to make it highly profitable to stay in school and college as long as possible, the flow from school into jobs at the intermediate levels is reduced.

1.25 At present, therefore, demand and supply for education are caught up in a vicious circle. Because of past neglect of education, and the unprecedented growth of the economy, there has been a rapid growth of modern sector posts which too few Batswana have been available to fill and which have therefore been largely filled by expatriates. The requirements for these jobs have been defined not in terms of work experience but in terms of educational qualifications and salary differentials have similarly been based on the same criteria. This being the case, there has been a drive by Government to expand secondary and higher levels of education, before the numbers of qualified candidates were available to fill them. Public demand for such places has naturally been high since the cost of education was so heavily subsidised and the rewards of success were so great.

1.26 Unfortunately the results of the strategy do not appear to have been satisfactory -- quite apart from the dualism created -- because the productivity of graduates from secondary and higher education does not always seem to have been commensurate with their qualifications and pay. This reflects, first, a poor educational base, too rapidly expanded. Second, it results from relaxing standards for entry into higher courses, because of the 'manpower shortage', with a consequent lack of motivation on the part of students in secondary and higher education. Finally, it reflects the excessive emphasis on theoretical study and qualifications in school, because jobs are so widely allocated on the basis of what certificate a Motswana holds rather than on what he can do.

1.27 Moreover the present strategy seems bound to lead in time to a situation where, because salary levels are so high and so much employment is in the public sector, first junior secondary and then senior secondary certificate holders become 'surplus'. One would then have the situation where a small group of people enjoyed high salaries in the modern sector by virtue of having been first in the field to qualify; but others just as able could not get jobs -- or would not even be permitted to qualify -- because manpower demand would not justify expansion of education. This is not idle speculation. Government plans already talk of restricting secondary education expansion precisely at the moment when primary school output rises most sharply.

1.28 Clearly action in the education sector, though important, can only be successful if it is part of a multi-faceted strategy to deal with these problems. So long as pay differentials and job recruitment procedures are based on qualifications, the education system cannot free itself of the 'diploma disease' and the rush for certificates. A simultaneous effort of reform is needed in the pay and recruitment fields, the financing of education, the structure and content of education in relation to work, and the certification procedures.

International Political Factors

1.29 It is impossible to plan for the future in Botswana without taking into account the country's geopolitical situation, virtually surrounded by repressive white-minority governments that maintain themselves in power by force of arms. Education is affected by this situation in a number of ways. First, the whole country is subject to major uncertainty because if racial strife caused Botswana's borders to be closed and her transport and trade links to be cut, the economic impact would be enormous and would seriously affect Government's ability to carry out planned programmes. Second, although Botswana cannot support a major military force, it may well prove necessary to devote a greater portion of public spending to internal and border security, which would divert resources away from economic and social development programmes including eduction. Third, Botswana depends to a great extent upon expatriate teachers from neighbouring countries, and major changes in the political climate could affect the flow of teachers. Fourthly, it is possible that Botswana may have to make increasing provision for refugees from South Africa, Rhodesia and Namibia, including educational provision in some cases. Finally, Botswana's education system has an important responsibility to express clearly the country's national principles and the spirit of a free, non-racial society at a time when neighbouring countries are subject to internal turmoil and racial strife.

PROBLEMS WITHIN THE EDUCATION SYSTEM

1.30 The first decade of Independence has seen tremendous achievements in education in Botswana, as we have indicated, and there are many valuable features on which to build for the future. If we seem to dwell at length in this section upon the problems, it is not because we overlook the system's strength. It is rather because our terms of reference charge us specifically to identify problems and issues. Statements submitted to the Commission indicated widespread dissatifaction with the education now provided to the nation's children. The implicit goals of the present system differ from Botswana's national principles.

1.31 Evidence gathered by the Commission indicates that the schools are not even achieving their narrow academic objectives well (see Annex 1 for a summary of findings of the Educational Assessment study performed for the Commission). Average scores on achievements tests administered for the Commission are low, and a substantial portion of children have unacceptably low scores on reading and mathematics tests. In other words, the schools fail to provide a basic academic groundwork for many children. An automatic promotion system was instituted soon after independence and did away with failures in every grade, high rates of repetition and wastage, and limited outputs at Standard 7. Most children now remain in school throughout the primary level, which is most unusual in Africa. However, in the absence of adequately trained teachers, provision for regular checks on pupils' progress, and help to pupils who are lagging, automatic promotion has created new problems and perhaps replaced one kind of waste with another:

higher outputs of school leavers who cannot read. Automatic promotion was the subject most frequently raised in submissions to the Commission.

1.32 Botswana's education system has been based on models from the developed countries. Despite a curriculum and syllabus review in 1968 and 1969 and continuing efforts to develop improved curricula, the syllabuses still retain strong traces of their European origins. This is especially true in the social studies syllabus, which tends to alienate pupils from their culture, as many submissions to the Commission have observed. Moreover, too many syllabus units proceed from the unfamiliar and unknown to the known, the reverse of approved pedagogical sequence.

1.33 The system emphasizes preparing pupils at each educational level for the major examinations at Standard 7, Form III and Form V; rewarding the competencies that will be used at the next higher education level, and ultimately preparing young Batswana for white collar, modern sector jobs. This is true even though the majority of all primary school leavers do not obtain any further formal education and only a tiny fraction (approximately 2 percent) ever advance to university level. This creates strong pressures toward memorisation of facts in preparation for the exams rather than strengthening the basic skills of pupils and developing the ability to think and reason. The exams have a powerful "backwash effect" on the teaching and learning process, but there is no policy control and direction of the examination system. The Primary School Leaving Examination at Standard 7 is set jointly by the Ministry of Education and the Regional Testing Centre in Botswana. The Junior Certificate Examination at Form III is set by the Regional Examinations Council, and the Cambridge Overseas School Certificate examination is used at Form V. The relationship between the several examinations, and between the exams and the objectives of education at the levels to which they apply, are poor.

1.34 In the first decade since Independence, enrolment in primary schools has increased by 74 percent and secondary enrolment has grown by five times above the 1966 levels. Such rapid quantitative expansion has been necessary and in many ways desirable. It has, however, imposed great strains on the system in terms of teacher supply, buildings and equipment, and administration. At the primary level teacher requirements have been largely met by employing untrained teachers. At the secondary level it has been necessary to rely on expatriates to fill three quarters of the teaching posts. High rates of turnover among these expatriates impair the quality of secondary education. Enrolment expansion has also caused shortages of school buildings and, although major capital investments have been made, many primary classes are still taught out of doors and supplies of furniture and equipment are seriously inadequate.

1.35 The scale and speed of expansion have put heavy administrative burdens on the Ministry of Education and have impaired its ability to supervise primary schools adequately. The Ministry staff has had too little time to consider goals and policies or improvements in the quality and content of education. The size of the Ministry has not kept pace with the growth of its responsibilities. In spite of recognized problems affecting the curriculum and syllabus, for example, the Ministry of Education still has no central curriculum development unit.

1.36 Emphasis during the last decade has been upon development of secondary, technical and higher education in order to meet Botswana's pressing need for qualified middle and upper level manpower and to permit rapid localisation. Although primary education has grown most in terms of numbers and has received substantial public investment, insufficient attention has been given to this level, and its share of total educational resources has not reflected its share of the total number of learners. This is because average expenditures per junior secondary pupil are approximately P430 per year and for senior secondary level. P450 per year; and University levelexpenditures are of the order of P3,600 per student per year. This compares with an approximate cost of P40 for each primary pupil. These great cost differences mean that the priority for expansion of the post-primary levels has imposed very heavy cost burdens and that the rate of growth of the educational budget has far exceeded the overall rise in enrolments. The formidable costs in present secondary schools, reflecting a large proportion of boarders, high secondary teachers' salaries and the cost of books, materials and other inputs, limit the possibilities of expanding post-primary education unless radical departures are made in organisation and costs. The Commission has sought a way out of this impasse.

1.37 The impasse is particularly serious because the decreasing age of primary school entry means that many children finish school at too early an age to support themselves by work. So long as present cost structures persist there is no possibility of junior secondary education absorbing a significantly higher proportion of primary school leavers because of the high costs involved; nor is the present highly adademic education provided at junior secondary level an appropriate basis as preparation for work.

1.38 There are serious inequalities in the provision of education, especially between urban and rural regions. Primary education in the rural schools is poor in comparison with urban areas. Instead of compensating for the out-of-school disadvantages that rural children suffer as a result of the absence of services, amenities and a varied cultural environment, the present system increases their disadvantage because rural schools have more untrained teachers and poorer facilities. Thus the rural children have a much lower chance of gaining access to secondary schools. Given the strong association between education and earnings, the maldistribution of educational opportunities tends to reinforce inequalities of income distribution.

1.39 The opportunities for out-of-school learning -- providing useful skills and knowledge or occasionally leading to some formal certificate -- are limited in Botswana. The need for out-of-school education is even greater in Botswana because the lack of school facilities in the past has resulted in there being very many adults who missed educational opportunity earlier but who are capable of pursuing courses of study. The Botswana Extension College has begun to develop a variety of courses that can be pursued part-time, often by correspondence and radio, and a wide selection of other non-formal education activities now operate. However, the network of out-of-school learning opportunities enabling people to continue their education on a part-time basis needs to be further developed and better known and to be underpinned by an incentive system that encourages people to consider part-time learning as an attractive alternative to full-time courses.

1.40 The problems and issues discussed above -- both external to the education system and internal -- provide the context within which the Commission has been asked to make recommendations for improvement. Even though some of the factors are outside the education sector and even outside the control of Government, they must all be taken into account in proposing recommendations for the future. In the following chapters we consider the goals towards which Batswana wish their education system to be directed, the strategy that the Commission proposes, and specific recommendations for each level and type of education and the over-all administration.

CHAPTER 2

Educational Goals: Education for Kagisano

2.01 Any strategy for planned educational change must be based on a clear idea of the aims of education, and the Commission has been asked specifically to clarify the aims of the education system in Botswana.

2.02 There are many levels of educational goals, ranging from the highest level national aspirations down to very specific operational objectives for each level, grade and subject taught in schools. The Commission has confined itself to outlining the major, high level goals of education, as expressed by Batswana, and to indicating some of the broad implications for the organisation, content and style of education. Assuming that these goals have been correctly identified it will be for policy makers, administrators, curriculum developers and teachers to specify the more immediate classroom and course objectives that the high level goals imply.

2.03 The principal aim of education is individual development. The individual is of unique value and it is only through changes in the developed capacities and attitudes of individuals that society changes. The focus of education in the school and classroom should therefore be upon learners: enabling them to acquire the knowledge, skills, attitudes and behaviour that will give them a full, successful life and continued personal growth; and equipping them to participate effectively in a rapidly changing society. All aspects of education including the curriculum and syllabus, the teaching methods used in the classroom, teaching materials, examinations and even school buildings have a part to play in assisting the learning process and should be designed with this purpose in mind. Our fundamental conviction is that the primary purpose of an education system is to enable people to learn, thus much of our report is concerned with the creation of conditions in which more effective learning takes place, and with devising means to assess how well education is accomplishing this task.

2.04 Moving from the individual to the social aims of education, the Commission starts from the premise that any education system must relate to and reflect the values of the society of which it is a part. In its search for a better education system for Botswana the Commission therefore started by asking what kind of society Batswana want to create.

2.05 Fortunately Botswana possesses a set of national principles clearly outlined by her leaders as the foundation for building the country. The four national principles are:

Puso ya batho ka batho - Democracy

implying a voice for all the people in their future, not only in political elections but also in community, social and economic affairs as well.

Ditiro tsa ditlabololo - Development

involving the management and use of Botswana's physical resources to create a strong economy, whose benefits all may share; also the building up of Botswana's human resources so as to enable every Motswana to realise his or her potential.

Boipelego - Self-reliance

both at the national level, in terms of bringing the economy under local control and replacing expatriates as soon as feasible, and at the individual level, enabling Batswana to progress through self-help on their own initiative.

Popagano ya sechaba - Unity

of all the people of Botswana, with a greater awareness of national identity and deeper national loyalty and pride.

In combination these four principles produce the national philosophy of *Kagisano*, meaning social harmony, and embracing the concepts of social justice, interdependence and mutual assistance.

2.06 Given this firm sense of national direction, the Commission's first task has been to reflect on how the education system of Botswana might help to produce a society whose major characteristics are democracy, development, self-reliance, and unity, and which expresses the idea of *kagisano*.

2.07 We stress in this connection our firm conviction that education -- even the best school system one might imagine -- cannot on its own change society, and does not hold the only key to solving all the nation's problems. One should not expect too much of teachers and schools. Even if education in Botswana operates in full support of the national principles, it cannot by itself bring about social change. It can only assist in the process. Other social forces and social policies in such areas as rural development, income distribution, hiring practices and employment must pull in the same direction if education is to play its part. Education is often blamed for social problems which have at least some of their roots in failures on the part of society at large. If society is so organised as to distribute incomes very unequally, largely on the basis of educational qualifications, then it should not blame schools for orientating themselves to helping their students to pass examinations. If life is better in the towns, and if insufficient recognition is given to those who labour faithfully in outlying parts of the country, then education for rural development can hardly be given meaning. Education can only fulfil its responsibility to society if parents, the community and its leaders in turn fulfil their obligations to young people and to the schools. We shall return to the theme that educational reform must be part of broader social and economic reform a number of times in our Report.

2.08 At the same time we do believe that education's role in building a better society, even with the limitations mentioned above, is an important one. We therefore think it useful to explore at some length three main ways in which education and training can contribute to the realisation of *kagisano* and its associated principles. First, the structure and organisation of education must reflect the national principles. Any features of the education system which impair democracy and development, which undermine self-reliance and national unity, or which give rise to social injustice must be changed. Second, the curriculum of the schools must reflect Botswana's national values. This will affect both what is taught, and how it is taught. Third, the schools themselves are small communities, and only if the life of the schools and colleges gives expression to Botswana's basic principles can young Batswana be expected to understand and cherish them. It will be meaningless to speak of democracy, development, self-reliance and unity if the schools themselves show quite opposite tendencies.

Education and Democracy

2.09 Democracy involves giving each mature person a voice in the running of affairs and the chance to participate, directly or through representatives, in decisions affecting his life. If democracy is to work, then people must have sufficient information to make wise decisions, and their decisions must be respected.

2.10 In education the implementation of democracy will have several implications. As many decisions as possible must be left to those most closely affected by them -- the community and parents, professional workers in education, and the pupils themselves. Communities must have a direct voice through school committees, through parent-teacher associations and through the formal structure of government, in the way their schools are run.

Teachers and other educational professionals must be consulted about changes in their conditions of service. They must be given the opportunity to comment on impending changes, and to participate in the work of syllabus change and curriculum reform.

2.11 The curriculum should include teaching about democratic institutions and the way they work, and education should incorporate practical experience of democratic institutions through visits to *kgotla*, council or Parliament. A respect for democratic values must be instilled.

2.12 At the institutional level democracy implies that head teachers will hold consultations on important matters with their colleagues through regular staff meetings. Pupils, because of their relative immaturity, can be given only a limited voice in any important decisions affecting the school community, but should be encouraged to manage their own affairs to the greatest possible degree and to participate in the running of the school. They should be given every possible opportunity to exercise choices in groups and individually. In particular they should have every facility for information about opportunities for further study, training and careers and their expressed wishes in these regards should as far as possible be respected.

2.13 The Commission's recommendations later in the Report take into account the need to promote democracy in and through education in Botswana. Such recommendations include most notably those concerning the governing and control of primary and secondary schools, reform of curriculum content, changes in school organisation, improved careers advice and counselling services for students, and strengthening of teachers' unions and establishment of consultative machinery on professional matters.

Education and Development

2.14 Development is a process whereby the nation as a whole and its individual citizens come to have improved standards of living; increasing control over their environment; more options in the disposition of their time and material resources; and greater choice in the items they consume. It involves the gradual elimination of dependence -- for example on the weather, or on powerful interests within or outside the country, or indeed on outdated attitudes which so often 'colonise' people's minds. Development depends on the creation of productive assets and on their wise management. It also presupposes a skilled and independent-minded population.

2.15 First, education must be organised to serve development. This involves turning out productive citizens capable of manning the existing positions in the economy and of creating new opportunities for self-employment or employment of others.

There must be courses and institutions that provide people with skills valuable in occupations. This does not mean that all education must be exclusively or mainly technical in the narrower sense of working with one's hands or with tools and machines. To be successful at work one also needs mental and social skills and organisational abilities. Besides farmers and craftsmen, Botswana also needs people in management and teaching, for example. But it does mean that adequate facilities for acquiring specialised skills must exist, and that all pupils and trainees should be adept at applying their skills and knowledge in practical situations. An important element in preparation forself-employment is the development of initivative and self-reliance by students, discussed in the following section.

2.16 Another aspect of education for development is that the education system must conserve resources. It must use finance and skilled personnel as sparingly as possible, for these could alternatively be employed elsewhere in the economy, perhaps in more productive uses. Ways to reduce the cost of educating people in secondary, technical and higher institutions must be found, if education is to contribute to development, and not impede it.

2.17 A less obvious, but equally fundamental, way of looking at education and development is to think in terms of organising education not only for development, but also through development. The present education system involves a double cost to the economy first in terms of the taxes required to support the system and secondly in the form of the lost production of those studying full time in schools and colleges. Parents are very conscious of the cost of lost services to the family when they send their children to school, but society is less aware that part of its 'manpower shortage' may be due to the practice of removing many of its best educated people from production in order to give them more formal education. This sometimes makes good sense, and it would do so more often if the only place to learn were in school. But this is manifestly not the case. A great deal of the competence of skilled workers is gained through experience and training on the job while being productive. If more emphasis can be placed on educating people whilst at work, a number of benefits follow. The cost of their education is likely to be less; they continue to contribute in production while learning; and acquisition of knowledge and skills in a productive environment is likely to be more economically valuable education. In Botswana the Brigades, on-the-job training in BEDU enterprises, in firms and in government, and evening classes for workers already provide interesting prototypes for a system that could be developed further. Of course, if enterprises are to carry more of the burden of education and training they must be given sufficient incentive and be properly staffed for the job.

2.18 Second, at the level of curriculum, both education for development and education through development imply a number of things. Pupils and students must be taught about their country, its resources and conditions for its development (and the Development Studies syllabus makes a useful start in this direction). They must be helped to develop their own skills and abilities to participate in this development process -- literacy skills, computation skills, problem solving skills, technical skills and manual dexterity. These should not be abstract skills, learned in theory but not applied; rather they should as far as possible be developed through practice in solving real problems, contributing to actual development projects, and producing goods and services for use by school and the community. A proper balance must however be retained. Sustained production cannot be expected of immature children; nor can schools realistically be expected to be entirely self-sufficient production units. Above all a commitment to their society and a desire to improve it must be inculcated in pupils and students.

2.19 Third, development oriented education also has implications for the life of educational institutions. Schools and colleges might survey the goods and services they use and consider how many of these they could produce themselves by their own efforts. The possibility of undertaking development projects, or of building and maintenance work for the school can be explored. Beyond that, education for development implies that schools will look beyond their own fences to the community and consider how they may contribute to community improvement, for example through literacy classes and construction work.

2.20 Many of the recommendations contained in this Report are directed towards a developmental orientation for education. In particular the Commission's proposals regarding the development of part-time studies, the structuring of technical and vocational education, the content and approach embodied in the curriculum, the economy in the use of resources, and the association of schools with community development fall into this category.

Education and Self-reliance

2.21 Self-reliance is important for the nation, for institutions, and for the individual. Botswana is heavily dependent on foreign sources of supply for goods and services and on foreign manpower. Self-reliance for the nation means freeing the country from dependence on expatriates and from the instability in staffing and loss of experience-accumulation that use of expatriates implies. Self-reliance for institutions and individuals involves a readiness to take initiatives and to seize opportunities without waiting for Government orders, or for Government to provide a service which the community or individuals could organise for themselves. The Botswana University Campus Appeal, through which about one million Pula were raised from voluntary contributions, is an important example of self reliance.

2.22 What does self-reliance imply for the education system, its organisation and financing? First, it means that communities and parents must accept their responsibility for the education and training of the young. The upbringing of Batswana children and adolescents is not primarily the responsibility of government and the schools. It is the responsibility of the entire generation of adults. Schools can support the effort of parents, but cannot substitute for the love, care and concern that a child should derive from the home. Where there are no schools, parents themselves working together or through community and social organisations should seek to provide them until such time as Government is able to come in and help. Second, encouragement of self-reliance implies that communities which start schools, training activities and courses with self-help should receive moral and material encouragement from Government. Partial Government assistance should not imply a promise of complete take-over, for that would be the negation of self-reliance. It should rather be a stimulus and encouragement to the further commitment of resources and effort by communities and individuals. Third self-reliance means providing opportunities for those individuals who are prepared to devote time and effort to starting or continuing their education through evening classes and part-time study. Facilities in the form of correspondence courses, study-centres, libraries, teachers and advisers must be available to those who want to educate themselves, whether these are adults wanting to master the basic steps to literacy or to learn a trade, boys and girls wanting to pass JC Maths and English, or school leavers anxious to learn typing. Fourth, self-reliance means that Botswana as a nation must as quickly as possible take responsibility for her own education system, defining the goals and policy objectives and undertaking the professional work in teaching and curriculum development. The formulation of realistic but imaginative plans for producing Batswana staff for secondary and higher levels of education is a high priority.

2.23 Self-reliance can be promoted through the curriculum, not so much as a subject of instruction as a way of teaching and learning. Self-study skills which encourage the learner to find out for himself by observation, by use of reference materials, by making enquiries at home and in the community, are valuable in themselves and an important foundation for those who may leave school and want to continue with part-time study or proceed to higher education. Excessive use of lecture methods and 'spoon-feeding' pupils with notes may stultify independent thinking and a spirit of self-reliance.

2.24 Self-reliance must also enter into the spirit of the school life. Teachers can be inventive in producing their own teaching materials. Pupils can be helped to organise their own activities and to construct for themselves facilities and amenities they would like to enjoy. Schools can produce some of the food they need and perform many labour intensive services for themselves. In isolated schools staff members should be encouraged to learn to service the school truck, repair the roof, the electric generator or the water pump. It goes without saying that self-reliance implies that institutions will be given greater autonomy. An institution cannot be expected to exercise initiative if permission to use every P20 has to be sought from higher authority.

2.25 Recommendations are made by the Commission in this Report for inculcating a spirit of self-reliance in and through education. They include the development of systems of partial assistance to community education facilities, encouragement and support for part-time learning, proposals for the faster localisation of educational staffing, suggestions for new approaches to teaching, and the granting of greater decision making powers to schools.

Education and Unity

2.26 Unity embraces many important ideas such as loyalty, cooperation and a sense of national identity. It does not mean uniformity, but rather emphasis upon the common bonds and interests between Batswana of different region, ethnic group, religion, political party, or economic circumstance. Differences will be understood, appreciated, and tolerated, but for the overriding purpose of seeing how all Batswana are mutually dependent on one another and how each has something of unique value to contribute to the nation. The pursuit of unity calls for every Motswana to appreciate his or her rights and responsibilities as a citizen of Botswana, to become fluent in the national language, and to take pride in the national cultural heritage.

2.27 Education is of vital importance in developing a sense of national unity and national identity. Indeed it is potentially the most important single instrument for nation-building in any country.

2.28 In the first place education must form a unified system. Schools and training courses in different parts of the country must be properly linked to a national system so that learners can qualify themselves appropriately to move from one institution or level to the next without undue hindrance. Unaided schools and continuation classes should also be linked with the public system so that young people who follow a self-help path will not be blocked from re-entering the public school if they demonstrate academic ability. Local curricular modifications designed to suit local circumstances are desirable but should not be allowed to impair mobility. Another aspect of unity is that teachers and other educational personnel must be prepared to serve wherever they are needed in Botswana. The Commission also feels that a truly national system of education will only be possible when the majority of teachers in second level education are Batswana. Finally, it is obvious that the principle of unity precludes the existence of separate elite streams within the public education system.

2.29 Secondly, the curriculum of the schools must stress national unity and national identity. A fundamental requirement is that the national language, Setswana, must be mastered by all, for it is an essential means of communication between Batswana, and is the medium through which a great deal of the national culture is expressed. Next, emphasis must be placed throughout the curriculum on the local Botswana context -- in art, music, literature, language, history, geography, science, practical studies, and especially in civics or development studies. The purpose is to make Batswana thoroughly familiar with their nation, its institutions and achievements; and to take pride in its heritage. At the same time students should learn about the country's problems and how they are being tackled. The emphasis on Botswana should not be one of blind adulation and should not be allowed to become parochial. Botswana's links with the international community and the inter-dependence of all peoples should find their place in the curriculum.

2.30 Thirdly, the life and structure of the school should be arranged in such a way as to emphasise a sense of nationhood. The national flag, wall charts and maps of Botswana should be displayed in every school, and national events should be commemorated. Modest funds should be put aside for students to travel beyond their locality to other parts of Botswana. National competitions and festivals in sports, music and arts should be organised.

2.31 Recommendations designed to make Botswana's education more truly national will be found throughout this Report, particularly in the areas of teacher deployment and staff localisation programmes, and of curriculum and examinations.

Education and *Kagisano*

2.32 *Kagisano* has been described by His Excellency The President as the totality of the four national principles outlined above and much has already been said to indicate how *kagisano* can be realised through education. Two further aspects of *kagisano* should be mentioned. One is the idea of social justice; the other is the sense of community and mutual responsibility. We discuss these in their relationship with education in turn.

2.33 Social justice implies fairness and equity. This is often confused with equality, itself an important aim of policy. Because education is so expensive at some levels, it is unfortunately impossible to give an identical amount of secondary and higher education to every Motswana. The important thing is to make the distribution fair or equitable by providing equal opportunities.

2.34 In distributing educational places, there must be no discrimination on grounds of sex, ethnic group or religion, and wide tolerance in admission ages must be allowed so as to take account of different circumstances in individuals. Examinations which test both achievement and ability (or aptitude) to complete the next stage of education successfully are normally regarded as the fairest way of distributing places and of excluding personal bias in the process of selection. But these examinations must themselves be scrutinized, to ensure that they do not contain bias against children from certain language groups, rural areas or poor families. Moreover, unless the quality of primary schools is more or less even throughout Botswana, there is the likelihood that better examination results of successful children may largely reflect better schools and teachers in the more developed areas, rather than real differences in ability. Since secondary and higher education qualify people for positions of leadership in the country, there is a clear danger that economically less favoured regions and socially deprived groups might be cut off from the chance to participate in the direction of national affairs. In allocating places in the selection process, it may be necessary in some instances to supplement examination performance with other criteria, for example by using a system of quotas.

2.35 Where rationing of education is unnecessary or undesirable, as at primary level, equality should be the goal and fees can eventually be abolished. At this level the principle of universality must be upheld. True equality implies that schools will as far as possible be made geographically accessible to all, that they will be approximately equal in quality, and that scarce qualified teachers, books, materials and permanent buildings be distributed throughout the system so that Batswana children are actually treated equally in school. Indeed at every level -- primary, secondary, higher, technical, teacher training -- equality and equity demand that educational institutions be distributed evenly across the country and that institutions of the same kind are given approximately the same share of the available resources. This cannot be achieved overnight for the obvious reason that many gross inequalities have been inherited , but it should be the direction in which policy moves.

2.36 But fairness does not necessarily imply that fees should be abolished and education made free at all levels. Botswana cannot yet afford free secondary education for all, and families whose children receive secondary and higher education are being largely supported from taxes paid also by those whose children do not enjoy it (and who may in many cases be poorer). Because education brings much higher incomes to those who complete courses successfully, a society must be on its guard against the danger that 'free' education could become a way of making the rich richer at the expense of the poor. To the extent that Government decides on a fair incomes policy, limiting the extra pay people receive because they hold this or that certificate or degree, the danger of increased inequality through education will be mitigated. But so long as big differences in income do result from receiving secondary or higher education -- and the differences are relatively large in Botswana at present -- and so long as Government cannot afford to give this education to everybody, it is fairer to retain fees and to ensure that adequate bursary assistance is available to enable poor children to meet the full cost of their education. The money raised from fees paid by better-off families, can be used to extend education to more people.

2.37 Education will always have to be rationed at some levels. It is needed for national development, yet cannot be provided in equal measure to all. But efforts can be made to lessen the wide gaps in public expenditure per place in primary, secondary and higher education, between government and non-government schools, and between school and out-of-school education. The amount of privilege enjoyed by certain institutions and courses can surely be sharply reduced. Most particularly, the right of adults and adolescents to learn or to continue to learn must be upheld and supported. Equality in education implies that every member of society should have avenues open to him or her to improve his knowledge and skills, if he or she cares to do so.

2.38 The principle of equality should be stressed in the school curriculum and in the way people are treated in educational institutions. Less able children in the class should receive at least as much attention from the teachers as the more able, and the creation of unnecessary privilege in the school for any group of pupils should be avoided. Brigadesmen and secondary school students, whether or not they belong to the same institution, should be accorded equal respect and status and the same is true for their teachers. Similarly equality implies that the same respect be accorded to non-teaching staff as to teachers.

2.39 The sense of community and mutual responsibility is another aspect of *kagisano* deserving special attention in the context of education. Community feeling is at the root of African culture and the education system must preserve and foster it. This can be attempted in several ways.

2.40 Reference has already been made to the need for arrangements whereby community responsibility for education can be embodied in the system for governing schools. We would also stress the importance of parents and local leaders, including members of parliament, local councillors and traditional leaders, visiting the schools regularly and demonstrating to them that the adult world takes a close interest in their affairs. Another aspect of mutual responsibility is the obligation of those who have received education towards the community at large, which has paid for it. The nation gives costly secondary and higher education to its children either free of charge or at subsidised rates, not in order to make individuals personally rich, but in order to develop the community. Those who are fortunate to receive it should stand ready to discharge their 'debt' to their country in whatever way the Government finds most appropriate. It is not too much to ask that they should be required to give a year or two through national service, to accept a bonding obligation, or to repay (from the higher salaries which their education has earned them) some of the money costs of their education.

2.41 The curriculum of the school should emphasise compassion and mutual responsibility. Incentives to individual effort and a sense of personal responsibility are essential components of a healthy education; but they should be part of constructive cooperation between learners and a spur to effort by others, not the occasion for diminishing the self-confidence and dignity of other members of the group. Excessive individualism and competitiveness may promote jealousy and envy which are the very contradication of *kagisano*. Cooperative striving, not anti-social strife, should be the aim.

2.42 The school or college itself must operate as a community if *kagisano* is to be realised. Teachers have a responsibility toward pupils which does not stop, after lessons, at the classroom door. Informal contact and friendly relationships with adults are an important part of growing up. Each child, bright or backward, capable or handicapped, Motswana or foreigner, must be helped to feel a worthwhile member of the school community. Nor must the sense of community stop at the school gate. The Commission's survey revealed that not more than half the teachers questioned were involved in community activities. Educational institutions are part of the wider society. Just as they can reasonably expect support from the community in which they are located, so they can use their own talents, and resources of time and labour, to assist the local villages or towns-people in development efforts, with the provision of social services, with teaching for those out of school.

2.43 Pursuit of the national ideal of *kagisano* informs the whole thinking behind the Commission's Report. It is an effort to translate *kagisano* into reality, and end the isolation and privilege so often inherent in education, that underlies the recommendations in this Report on equal access to education, more equal distribution of educational resources throughout Botswana and between institutions, more positive measures to help the less fortunate, and closer links between school and community.

CHAPTER 3

Strategy for Educational Development

3.01 The Preceding chapters have reviewed the social and economic context in which the education system operates, major problems and issues affecting education, and Botswana's national principles and goals. These provide a basis for re-examining the strategy of educational development.

CURRENT PLANS FOR THE DEVELOPMENT OF EDUCATION

3.02 During the period that the Commission has been at work, the Government has been engaged on the preparation of the Fourth National Development Plan (NDP IV, 1976 - 81) and the Commission has been able to benefit from the studies and data that have been prepared for the Plan. Government has indicated in that Plan that its proposals for the education sector may later be modified in the light of the recommendations of the National Commission on Education. A good idea of the way in which the education system would evolve on its present course (i.e. in the absence of measures proposed by the Commission in this Report) over the period up to 1981 can be obtained by examining the Education Chapter of the Plan.

Access to Education

3.03 If the Plan projections are realised primary enrolment will rise by 40 000 pupils or 36 percent between 1975 (116 000) and 1981 (156 000). Standard 1 enrolments will move from 25 400 in 1975 to 26 100 in 1981. Major assumptions underlying the rather modest projected increases are first that Government will enforce the official age of entry of 6 to 8 years, thus limiting Standard 1 entry, and second that repeating in Standard 7 can be limited to 15 percent. The number of Standard 1 places would be rather higher than the number of six year olds in Botswana. It must be emphasised that the figures in the Plan represent projections and do not amount to plans, since the Government does not at present have sufficient knowledge of, or control over, factors affecting primary enrolment. There is in any case some doubt whether the basic demographic data on which the projections are based are entirely accurate. Better data on school age population will be needed for future planning.

3.04 At secondary level NDP IV proposes that the total number of places in Government and Aided secondary schools would rise by 28 percent to 12 300, and the number of Form I places by 20 percent to 3 430 by 1981. A loan from the World Bank to finance the construction of six new secondary schools will help to make this possible. The chance for a Standard 7 pupil to enter a Form I place in a Government or Aided school would decline from 19.8 percent in 1981 to 14.0 percent in 1982. This assumes that repeating in Standard 7 can be reduced from its present level of about 25 percent to only 15 percent. Although the number of Form IV places will be increased by almost 40 percent, the transition rate from Form III to Form IV is expected to fall from 55 percent in 1976 to 46 percent in 1981. Degree intake at the university and at overseas universities will move from 140 (20 percent of 1975 Form V leavers) to 220 (18 percent of 1979 Form V leavers) between 1976/77 and 1980/81.

Output of and Demand for Educated Manpower

3.05 The Plan presents revised estimates of supply of and demand for skilled and educated personnel up to 1988. On the demand side the estimates are made up of numbers required by:

(a) growth of the economy (assumed to be approximately 10 percent per year to 1980/81 and 6 percent per year thereafter) and consequent new jobs;

(b) the replacement of attrition through retirement, resignation or death of existing workers; and

(c) the replacement of expatriates by citizens by the end of the 1980s.

These calculations (NDP IV paras 2.76 - 2.83 and 6.14 - 6.23) assume that there will be no growth in intakes to secondary education after 1980. If there were such growth, Government calculates that a surplus of secondary school graduates would emerge, and unemployment of secondary school leavers would result. The Plan assumes that there will be sufficient qualified candidates to allow intake targets to be met, although these are only projections of total Junior Certificate and Cambridge passes and no detailed projections of separate grades are made.

Teacher Supply

3.06 Current prospects for teacher supply at primary level over the next five years depend largely on the implementation of plans to expand the size of the training colleges and to launch a new in-service upgrading programme. Current intentions, as described in NDP IV, are to raise intake substantially at the three colleges from 350 in 1976 to 450 in 1979, and to launch the in-service upgrading programme for 960 teachers lasting three years and starting possibly in 1978. If these programmes can be carried through -- and there is already a donor in prospect to finance the college expansion -- then on the assumptions in NDP IV, the proportion of untrained primary teachers would fall from 36 percent at present to 22 percent in 1981 .

3.07 These plans will put some considerable strain on the pool of available entrants to the teacher training colleges and the average quality of entrants to the colleges would probably worsen in the absence of other measures. Projected levels of recruitment to Form IV from JC do not offer much hope of first or second class JC passes being available for teacher training for some time. The pool of good untrained teachers worthy of further training might be drained of talent if it were simultaneously expected to provide almost 40 percent of regular teacher training college entrants (since at present, 130 out of 351 entrants were mature age entry in 1976) as well as 960 for the in-service programmes.

3.08 At secondary level, Government plans to increase the output of Batswana teachers considerably. It is hoped to double intake (from 35 to 70) to the 3-year Teachers Certificate Course in 1977, and to increase education degree output from 24 in 1976 to 39 in 1980. If the proposals in NDP IV are implemented, the proportion of Batswana in the teaching force will rise from 24 percent (94) in 1975 to 62 percent (392) in 1981. It would then be possible to reduce dependence on expatriates from 303 now to 237 in 1981. The feasibility of these plans will of course depend on availability of sufficient qualified candidates and on whether they are attracted or directed into education courses. It should also be observed that the Plan assumes that annual wastage of Batswana teachers will be only 3 percent per year. If this were to be as high as 10 or 15 percent, which would be closer to actual experience in Botswana in recent years, the balance between Batswana and expatriates at the end of the Plan period might be considerably different.

Cost Trends

3.09 Education is accorded high priority in the Plan. Although the over-all rate of growth of public recurrent expenditure during the Plan period is expected to be 9 percent, education will be allowed to increase its recurrent budget by 15 percent per year, in real terms. This means that the Ministry of Education budget will increase from P10 563 000 in Financial Year 1976-77 to P19 827 000 in 1980-81; the Ministry of Education's share of public expenditure will expand from 19 percent to 23 percent. (Expenditure on training in other Ministries would raise this figure considerably). In view of the way recurrent expenditures are aggregated, it is not possible to calculate the expenditure per pupil by level of education from the projected figures. Very rough calculations indicate, however, that real expenditure per pupil will rise at all levels except possibly the University.

3.10 Development expenditure, on education, i.e. capital investment, will total P39.8 million during the Plan period. This represents 15.9 percent of all planned development expenditure. A substantial portion of this development expenditure will be devoted to expansion of junior secondary schools, aided by a loan from the World Bank. The capital cost per pupil place in the 6 new secondary schools will be P2 400, some ten times the cost of providing a primary place.

RE-APPRAISAL OF THE PRESENT SYSTEM AND TRENDS

3.11 For reasons which are readily understandable, in view of Botswana's lack of post-primary facilities at Independence and the rapid development of the modern sector since then, primary education has received insufficient attention and development has focussed on secondary and higher levels. This overemphasis on post-primary schooling has taken the form of allocation of capital funds, more of which might have been used to improve primary schooling, and the channelling of potential primary school teacher trainees into the upper levels of the education system as students. As a result a superstructure of post-JC and post-Cambridge courses has been created at great expense, and taking enormous resources to sustain, for which insufficient pupils qualify. Secondary schools and the University complain that they cannot attract recruits able to cope comfortably with their courses, yet in a sense the existence of institutions of higher education indirectly accounts for poor quality at primary level. In the short run some immediate manpower problems may be solved by depriving the primary schools of the material that would make the best teachers, but not without creating problems later. The farmer who eats his seed corn may be fed today, but will be hungry tomorrow.

3.12 On education and equity grounds, as well as from the point of view of the future supply of skills to the economy, the Commission recommends strongly that greater attention must be given to improvements in the primary sector, which is the foundation on which the development of the education system as a whole rests. This will imply not only direct expenditure on primary schools in the form of buildings, materials and staff, but also development of the services that support the improvement of quality, such as teacher training, administrative and supervisory services, curriculum and examination reform. Many of the recommendations in this Report reflect the Commission's major concern with primary education.

3.13 At post-primary levels the Commission advocates not so much a lessening of emphasis as a re-appraisal of strategy for the development of these levels. The planning of educational development in Botswana has thus far been very closely geared to estimates of manpower needs of the economy. With so many qualified expatriates in post and waiting to be replaced, it has seemed natural that localisation must involve producing Batswana with the same formal qualifications as the expatriates, obtained through the same educational pathways. This has then necessitated constructing a traditional kind of hierarchical education system -- even including the superstructure of a university institution -- in which prestige, costs and post-education starting salaries all escalate rapidly as one moves from primary to secondary to higher education.

3.14 The manpower approach to planning education has much to commend it in so far as it directs attention to the need to orientate the education system to the requirements of national development and avoids treating education as a purely consumption item. It provides guidelines to a country in an early stage of development and draws attention to the fundamental importance of putting the control of affairs in the hands of nationals as soon as possible. There are large areas of employment, particularly the teaching and medical services for example, where the manpower planning approach gives indispensable help in calculating the future demand for staff with different types of specialised training.

3.15 Although the manpower approach has been used sensibly in Botswana and has provided useful guidance during the early stages of development, the drawbacks of the approach should also be noted. It concentrates attention on formal qualifications obtained through formal schooling, and tends to undervalue experience on the job and the kinds of competences that are not easily certifiable. It also tends to underrate the importance of cost calculation, implying that high level manpower is 'needed' or 'not needed' regardless of whether or not it is cheaply produced and regardless of the rates of pay offered in relation to what people produce. As a result it all too easily becomes associated with a hierarchical employment and salary structure, in which a rather small group have a monopoly of high salaries and modern sector employment. Others who want to enter the same kinds of jobs are prevented because they are 'not needed', or because they cannot be employed at prevailing salaries. In fact, however, one might argue that cause and effect work the other way, and that it is the restrictions on the number of job entrants, caused by limitation of education and training, that make it possible to maintain a salary structure with excessive differentials.

3.16 The relevance of this to Botswana becomes clear when one considers the fundamental change in the balance between educational output at secondary level and jobs requiring secondary qualifications that are foreseen in present Government manpower forecasts for the 1980s. Until now, social aspiration for secondary education and the 'manpower requirements' approach have been allies. It has been possible to give a sound manpower justification for expansion of schools and training opportunities. Those students who have once obtained a footing on the bottom step of the secondary school ladder and have shown any sign of ability have been drawn inexorably upwards through the education system. They have been encouraged to believe that their further education was not only personally more rewarding than entering employment, but also of higher national priority. In the 1980s however, the government presently plans that this expansion should come to a halt, because the supply of high level manpower will be sufficient and the costs of expanding education at secondary and higher levels will be insupportable. Under present Government plans, from about 1980 onwards expansion of intakes to secondary education will cease, and instead of being the ally of educational expansion, manpower planning will become its opponent. The chances for Standard 7 leavers to continue in the public education system would actually decline, despite the growing prosperity of the country.

3.17 The political feasibility of restricting educational opportunity in this way, at a time when access to education yields such high private economic returns, is a topic to which Government will have to give careful thought. Apart from the difficulty of restricting educational expansion, the need to do so may also be questioned. The manpower forecasts of complete satisfaction of the economy's demand for skilled and educated persons assume that the existing structure of employment and of salaries will continue. But the capacity of the economy to absorb educated manpower depends largely on the way society and the economy are organised and the relative costs to employers of educated employees. The position is not that Botswana is expected to have an excess of skills and education. This will not be the case. Government's policy assumes -- quite correctly — that at present levels of secondary and tertiary education costs, and with present salary differentials for educated people, it would be neither wise nor possible to continue to expand secondary enrolment and output. If (and only if) it were possible to reduce education costs and to narrow the large salary differentials attached to possession of educational certificates, then expansion of secondary level learning opportunities would be not only socially desirable but also economically justified.

3.18 This is the background to the Commission's stress on the need to find new pathways to learning at secondary level. To provide these alternative pathways it is necessary to eliminate the discontinuities which currently exist in Botswana's education system. Four of the most serious discontinuities are discussed below.

The Discontinuity between Education and Work

3.19 At present full-time education is followed by full-time work or by unemployment. The advantages, both economic and educational, of linking learning and working more closely are, on the one hand, that learners can make a productive contribution during their period of education; and on the other hand, that it is highly desirable for workers to have continuing learning opportunities. The economic advantages would be that those learning would simultaneously be contributing to the family or national economy and would help to alleviate skill shortages, and that the cost of education for those who followed it part-time would be much less. The educational advantage would stem from the greater sense of meaning that may be given to studies when combined with production, the more mature and informed career choices that might be made, and the better motivation of students towards their learning.

The Discontinuity between Standards of Provision at Different Educational Levels

3.20 Reference has already been made to differences in cost between primary, secondary and higher education, and to the fact that one year's university education for one student now costs as much as one year's primary education for 90 pupils, or eight times as much as secondary education for a year. There can be no real educational justification for this gap in standards and costs between primary and secondary school, or between Form V and University. As already indicated high priority should be given in future planning to improving the standard of primary education, which will partly close this gap. Beyond this, however, the Commission accords great importance to finding a pattern for lower secondary school which is intermediate in cost between a primary school and the present day secondary school.

The Discontinuity between the Government Sector and the Non-Government Sector

3.21 Since society has some responsibility for the education of all young Batswana, it is anomalous that those for whom Government cannot provide places in the public secondary system receive no kind of assistance with their self-help efforts to remedy this deficiency. Should there be a full-grant public system alongside a no-grant independent system, or is it possible to devise programmes of partial assistance to struggling self-help and community educational institutions, perhaps along the lines of the recent recognition and support given to the brigades movement? It is notable that even now Government subsidises brigades training by P185 per trainee per year, and training in National Centre for Vocational Training (NCVT) by ten times as much. Previously brigades received no financial assistance. Many unaided primary schools are getting by on budgets of a few pula per pupil per year. At the secondary level a number of unaided schools operate at costs of approximately P100 per student year, all paid by the students and their families. These schools are poor in quality compared to the Government and Aided secondary schools. The Commission's survey shows that they have 54 percent untrained teachers, compared with 22 percent in Aided schools, and that standards of reading, mathematics and science achievement are notably lower. Yet despite the lower standards, private students must pay about P100 for tuition while those in Government and Aided Schools pay only P20 (excluding the cost of boarding in both cases) The private students cost the Government nothing while the cost per student year in public schools is P430. A modest injection of cash to the unaided institutions might bring a measurable improvement in their standards, and at the same time be a real encouragement to self-help effort. The Commission has been impressed by the spirit of self-reliance evident in many of the independent unaided secondary schools, a spirit that appears to be sadly lacking in some of the Government institutions.

The Discontinuity between In-School and Out-of-School Education

3.22 At present there are few opportunities for out-of-school learning. One can attend a continuation class in the evening, if living in or near a community that has one. A number of South African correspondence institutions offer training and education of varying quality often at high costs. The Botswana Extension College offers out-of-school courses but until now has not made available full courses from Form I onward (although such courses are planned). The Division of Extra-Mural Services at the University has offered a variety of courses but only a few of these provide an opportunity for students to complete a certificate course. There are a number of extension training programmes, as discussed in Chapter 7 on out-of-school education, but the total range of out-of school learning opportunities is quite limited. Moreover there is a tendency to look down upon those who are attempting to learn outside the formal educational system. Often the costs and effort required to complete a course by correspondence are higher than the costs incurred by the more fortunate students enrolled in full-time, subsidized formal courses. The Commission feels strongly that there should be more out-of-school learning options, that the quality of education and training obtainable in this way should be equal to the quality of formal schooling, that students should not have to pay more than their fellows in full-time institutions do, and that graduates of out-of-school courses should be treated in the same way as others holding the same certificate. Out-of-school education should be not only a feasible but also a desirable option for many, and should be promoted much more positively than at present.

A NEW STRATEGY FOR EDUCATIONAL DEVELOPMENT IN BOTSWANA

Underlying Principles

3.23 The new strategy which the Commission believes to be called for must be guided by Botswana's own national principles of democracy, development, self-reliance and unity. In particular the Commission would like to emphasise the following points which arise from the four national principles.

(a) The need to modify the content and improve the quality of education at all levels to ensure that it provides both the fundamental competencies that will enable young Batswana to contribute to development; and the attitudes and understanding that will foster democracy, development, self-reliance, unity, and *kagisano*.

(b) The need to consider the education of all the people, as implied by the principle of democracy. Sharp differences in geographical or financial accessibility of education to different sections of the population should be removed in so far as possible.

(c) The need to conserve financial resources and to promote economic growth while cultivating the nation's human resources. The principle of development requires an education system that is economic and productive.

(d) The need to encourage effort on the part of individual learners in their studies and on the part of communities in the provision of education. The principle of self-reliance demands this.

(e) The need for the education system to be a continuum; and for the differences and distinctions between the different levels of education, between in-school and out-of-school learning, between government schools and independent schools, to be reduced or eliminated as quickly as possible. This is the implication of the principle of unity.

Outline of the Strategy

3.24 Government should work towards removal of age and financial barriers to learning. Any plans to enforce limits on the age of entry to primary school should be postponed as long as conditions in rural areas make it difficult for young children to attend school. The maximum permitted age of entry into primary school should be raised to nine years. All secondary schools should admit pupils to Form I up to 19 years of age. As an alternative to full-time school attendance, however, there should be opportunities for older pupils to pursue their secondary education in a more adult atmosphere in part-time evening courses. Financial barriers to school attendance should as far as possible be removed. Primary school fees should be abolished in 1980. Secondary school fees for full-time schooling should remain, so long as access to secondary school has to be rationed, but a generous system of bursaries extending to the full costs of attending school should be available.

3.25 The development of primary education should have priority attention. This is the only education that most children receive and it is the basis for further learning. Unless the foundation at primary level is strengthened, one cannot look for much improvement at secondary or higher levels. The tasks at this level include extension of primary schooling to those sections of the population, mainly in rural areas, who do not now receive it; improving the curriculum and introducing systematic measures to assess children's progress throughout their primary schooling; and increasing the quality and quantity of teachers, buildings, equipment and materials at this level. If primary education can be substantially improved in this way, as we believe, then it should be possible within the next ten years to reduce the length of the primary course from seven to six standards as part of the overall restructuring of the education system that the Commission recommends.

3.26 Government should start planning for the extension of junior secondary education to a much greater proportion of primary leavers by the mid to late 1980s, with the aim that every Motswana child should receive nine years free public education. To this end, as soon as the necessary planning has been undertaken, the provision of primary schooling through grades 8 and 9 should be embarked upon. Whilst the Botswana Government must work out what is likely to prove practicable, the Commission envisages separate junior secondary schools in some areas, and adding grades 8 and 9 to existing primary schools in other areas where population is sparse. Association with primary schools would help to provide continuity of education, better utilization of staff resources, and economies of scale in operation. These should be day attendance classes. The best students should have the opportunity to pass into grade 10, at secondary schools. Eventually the present secondary schools should drop their first two classes and become selective three year senior secondary schools. With this in mind, no more Form I - V schools of the present type should be built outside the World Bank loan programme already agreed.

3.27 In order to give immediate impetus to the expansion of post primary educational opportunities, Government should develop a programme of professional support, and later of partial financial assistance, to community-sponsored junior secondary schools operating on a self-help basis. From the outset support for such schools should take into account their future in the longer-term system proposed by the Commission. Most non-Government secondary schools and continuation classes would eventually become part of the universal lower secondary education system. A minority of these schools, situated in areas not served by Government secondary schools, might later be integrated into the senior secondary system (grades 10-12).

3.28 By the end of the ninth grade most boys and girls will be capable of helping to support themselves, and should also be mature enough to undertake a good deal of independent study. Since Government will not in any case be able to afford full-time senior secondary education for more than a small minority for some considerable time, it would be highly advantageous to Botswana to provide opportunities for people to continue their learning on a part-time basis, while working, after leaving school.

3.29 Perhaps the main resource needed for a part-time education system of this kind is the effort and time of the part-time students. Motivation to study on one's own will depend on the quality and attractiveness of the learning opportunities offered. A part-time learning system requires a generous attitude by employers towards release of employees for an hour or two each week for educational purposes. The other main inputs are teachers, physical facilities and books and materials. The Commission believes that these could be found from a variety of sources, including most obviously the regular school system. Classrooms and laboratories can be made available after regular school hours, with proper supervision. Regular teachers may be attracted by additional pay to offer their services one or two evenings per week or at weekends. In the towns there may be many civil servants or their wives who would be willing to join in a special effort to help raise the educational levels of those who want to learn but have not been able to find places. Churches and voluntary agencies also have a valuable part to play in making available facilities and mobilising effort. An extended system of support services from the radio, the public library service and correspondence course organisations is also indispensable, and here the experience of the Botswana Extension College surely provides an excellent foundation on which to build.

3.30 It may be expected that a large part of the demand for continuation courses would be for general education including most particularly Mathematics and English at junior and senior certificate levels. But other school subjects, and more particularly commercial and technical subjects qualifying the learner for employment, might also attract many entrants if organised on a part-time basis. These could be especially useful if linked to regular work experience. In the short and medium term, when there are still so many adults who have never received a basic education , there may also be a demand for literacy and basic education classes. And until such time as nine years of education can be extended to all, there will be the need for part-time junior secondary education, as already provided in some of the continuation class institutions presently operating.

3.31 What the Commission is suggesting is that the length of universal schooling should gradually be raised, by the end of the next decade, to nine years. Beyond this base the main thrust of further expansion of both general and vocational education in Botswana should be of a part-time provision. The logic of emphasising part time education is that there are underutilised resources that can be mobilised for such efforts, that it is financially cheaper to mount, that those who engage in learning would also be contributing to the economy and to development, and that learners would be more mature and be able to bring their practical experience to bear on their learning.

3.32 For a system of the kind the Commission is recommending to work well, there must be careful organisation and high quality provision of out-of-school education. There must be a network of learning opportunities -- alternative pathways -- including part time or correspondence study for formal certificates, vocational skills training, extension programmes to improve skills, productivity and the quality of life, general information programmes to familiarise citizens with government policies and services, and purely recreational learning. The traditional image of part-time education as programmes with the worst students and teachers in the worst buildings, must be overcome. In order to accomplish this, however, the incentive system must be realigned to recognise and support the part-time institutions. In addition to the built-in attraction of part-time studies -- that they allow the student to earn while studying -- the lower social cost of part-time provision should be reflected in fees charged. Lower fees for part-time courses would encourage students to follow the educational pathway that is cheapest for the community. Moreover educational institutions and public recruiting institutions will need to adopt a positive and helpful attitude towards persons who have obtained their qualifications through part-time studies. There should not be maximum entry age limits or other requirements that discriminate against part-time students who may have taken longer to complete their course. Above all, the quality of the education provided has to be high enough to convince students that their chances of success compare with those of people who have pursued education on a full-time basis.

3.33 A coherent system of technical and vocational education should be created in Botswana. Such a system must provide a succession of courses with a clearly defined progress route from one level to the next, and linkages at every stage between vocational education and both general studies and employment. The objectives must be that no technical course and no job is a dead end from which opportunity to learn and improve one's capacities has been removed. Two particular needs must be met. The first is to establish clear benchmarks indicating recognised levels of competence in the vocational areas, and a national system of certification incorporating internationally recognised tests where this is considered appropriate. Second excessive organisational fragmentation and insularity in the mounting of courses should be ended. The subject of vocational and technical education is discussed at the end of Chapter 5 and in a special consultant report at Annex 3.

3.34 There is a danger of duplication residing in the present vocational training system, with its multiplicity of departmental and private training schemes inadequately linked to each other and often too small individually to benefit from economies of scale. On the one hand, the Commission would be firmly opposed to a monopoly of training provision being vested in a single authority, and considers that a variety of approaches and styles may be creative. Yet it strongly believes that programmes should be linked through a common set of standards; that common elements in diverse training programmes should be identified with a view to cooperative sharing of resources; and that employers who run their own training programmes should be encouraged, or in exceptional cases, required, to admit outsiders to their course. Botswana must use available training capacity to the fullest possible degree. Moreover, efforts should be made to develop a sound division of labour and a framework for productive cooperation between (a) training programmes offered by Government and parastatal agencies, (b) formal technical education institutions like, the National Centre for Vocational Training, Botswana Training Centre and Botswana Agricultural College, (c) employers' training programmes; and (d) other training organisations like the Brigade Movement. Finally the principle should be established that the criterion of a well-prepared worker or professional is not the certificate he or she holds but rather the ability to perform work tasks effectively; and that any sound system of vocational education must provide for the integration of theory and application. A basic principle of all technical and vocational education in Botswana should be its combination with work experience, in most cases on the basis of part-time studies for those who are working.

3.35 Teacher training is obviously fundamental to any programme to improve the quality of education. Due to the limited numbers of well-qualified secondary school leavers, it will be difficult to increase substantially the numbers of teachers in pre-service training in the short run without further lowering the standard of entry into the teacher training colleges, which the college principals already find unsatisfactory. Yet the education system urgently needs more teachers. After a few years it may be expected that better quality candidates from both junior and senior secondary levels will become available. The question is how to meet needs for teachers in the interim period. Can one afford to fill up the profession with poor quality material? We fear that this would be the unintended result of Government's present proposal for a massive in-service upgrading programme for unqualified teachers, the great majority of whom have no more than a Standard 7 education.

3.36 The Commission rejects massive salary increases for teachers as a means to attract well-qualified recruits, just as it rejects any element of coercion of people into teaching, for reasons discussed in Chapter 6. Instead our approach to the problem of phasing of teacher training is to suggest ways of "buying time" until better-qualified teachers can be trained. It proposes a national service scheme for all Form V leavers, many of whom would serve for two years as primary teachers. Although the national service teachers could only be given a minimal period of preparation for teaching, they would have successfully completed five years of secondary education (the same number of years as a trained primary teacher) and would represent a major improvement over untrained Standard 7 leavers as teachers. In time the national service teachers could be phased out of the system, when greater numbers of well-qualified teachers are produced by the training colleges.

3.37 In the meantime ways must be found to strengthen the teaching profession and improve its status. In particular, better promotion prospects and a more attractive career structure should be created. In keeping with the general strategy discussed above, teachers at any level should have opportunities for professional development and advancement through part-time study. The Commission favours the concept of upgrading one's skills through a combination of learning and work for teachers as for other workers.

Higher Education

3.38 Although higher education is only partially within the terms of reference of the Commission, the University represents the keystone of the system, and full discussion of education structure is impossible without reference to the role of the University within it. Clearly it is not the Commission's place to suggest in any detail how the University should be organised or structured. This is in any case a matter which concerns Swaziland as well as Botswana and must be the subject of joint discussion and action between the two countries. On the other hand, it is impossible to envisage realistically any major education change and development at secondary and post-secondary levels which does not have the wholehearted involvement of the University and whose principles are not reflected in the University structure. Can one contemplate a successful secondary and post-secondary system which is modest in cost, available on a part-time basis and closely linked with the world of employment, if the University were high cost, and exclusively full-time, theoretical and pre-employment in orientation? The implications of the general strategy of education proposed in this chapter would, if carried over to apply to the University, suggest a different sort of third level institution. While the central core of the University would probably continue to be full-time degree programmes in a limited number of faculties, chosen with care in recognition of Botswana's development prospects, the philosophy and strategy set forth above would suggest the following strategy for higher education.

3.39 Since University education is the privilege of the few and produces very high private benefits, the cost of such education should be borne in considerable part by the beneficiary. In the case of students from poor families, bursaries should be provided to permit them to attend, but even low-income students could take Government loans to cover a part of their education costs, with provision for long term repayment out of the higher salaries they would earn. (Loan forgiveness in exchange for service in certain priority fields could become a flexible instrument for encouraging certain kinds of career choices).

3.40 In addition to full-time programmes, the University would offer a variety of part-time courses leading, in some cases to certificates or diplomas. These would be available at various levels and would be open to adult workers on a part-time basis at adult education centres throughout the country. A close relationship between university education and the world of work would be encouraged, using approaches such as internship, part-time and interrupted study, academic credit for demonstrated competence gained in work experience, and similar ways of linking education and productive employment. The University would embrace other post-secondary education and training institutions, as either constituent or affiliated bodies, so as to take advantage of economies of scale and offer a variety of learning paths.

3.41 The University would serve as a centre for research and intellectual stimulation in fields related to Botswana's economic and social development and would initiate and encourage links between its teaching and research activities and the work of government and private enterprise. It would also be a centre for study of Botswana's history, culture, language and art forms, playing a positive role in development of greater national understanding of and pride in Botswana's heritage and unity.

Combining Learning and Work

3.42 The educational strategy which we have outlined represents an attempt to plan for a wider provision of learning opportunities, and to move away from a system in which knowledge can be obtained only in full-time schooling and is recognised solely in credentials obtained from such study. The strategy is based, in large measure, upon the features of part-time study, combined with work experience, permitting individuals to learn at lower social and personal cost than through full-time classroom attendance. If this system is to work, it must be carefully organised and of high quality, which will require a strong commitment from Government.

3.43 First, Government must provide leadership and clear policy direction. Second, the system of incentives must be realigned to recognise and encourage part-time institutions and to reward equally those students who have chosen alternative paths to learning. Employing agencies and educational institutions must give equal weights to qualifications obtained through full or part time studies, and must not discriminate against part-time students. Areas of employment and training requiring a certain preparation, which can be gained through practical experience as well as by formal schooling, should admit applicants from either route. Jobs in government should be allocated on the basis of a civil service examination, not on certificates from schools. Vocational training institutions should permit mature-age entrants to enroll and should cater, through part-time instruction, for those who cannot leave their jobs for further training.

3.44 We have been suggesting that the opportunity to acquire academic qualifications should be made available in ways that cost less for the learner and for society. But it is also important that the employment market does not exaggerate the need for formalized study. The qualifications required for admission to employment should represent skills or knowledge genuinely needed for the position. Similarly, the salary structure must also reflect the actual nature of a job, not the educational level which the employee achieved. When employers continually raise entry qualifications for jobs and a graduate receives two or three times as much as a certificate-holder doing the same work, this undermines the country's attempt to achieve social justice and to educate her people for and through development.

3.45 Part-time study require considerable self-discipline and motivation on the part of the learner. Many students who have enjoyed the luxury of continuous schooling might find it hard to adjust to the new system at first. If the Government decides to accept the strategy we have proposed, then all students should have the experience of combining study and work. This implies that while they are in school, students should participate in practical work and be introduced to methods of self-study; and a national service scheme, which we advocate for secondary school leavers, could be used to establish work as a required component of educational experience.

Overview

3.46 The strategy that the Commission proposes will require substantial reorientation in some of Government's educational policies. Notable changes will include:

(a) Immediate priority for quantitative and qualitative improvement in primary education;

(b) Provision of nine years of schooling, with the last three years in day junior secondary schools, for all by about 1900;

(c) A reorientation of the curriculum to embody the national principles and to emphasise the acquisition of basic knowledge and skills that Batswana will need in a developing, rapidly-changing society and economy;

(d) Introduction of a national service scheme for Form V leavers, particularly in the field of primary teaching, so as to 'buy time' until sufficient well-qualified candidates for teacher training become available;

(e) Greatly increased emphasis upon part-time learning, out-of-school education, and the combination of learning and work; and

(f) Elimination of major discontinuities in the present eduction system.

3.47 The following chapters present these and other recommendations in detail, in relation to the major levels and types of education. Although the Report is organised into chapters corresponding to primary, secondary, teacher training and out-of-school education, the unity and inter-relatedness of all parts of the education system must be constantly borne in mind. It is also essential to recall that the strategy proposed requires not only changes in the education system but also careful attention to employment and income policies.

CHAPTER 4

Primary Education as a National Priority

4.01 Of all the levels and types of education it has been asked to consider, the Commission feels bound to accord the highest priority to improvement and reform at the primary level. Despite the great expansion achieved, the sizeable resouces allocated to it, and the untiring efforts of many devoted teachers and administrators, in several respects this sector is in disarray. Government has not been in control of recent expansion, nor has there been any coherent policy for future development. The administration of primary education is poorly coordinated. More importantly, however, the standard of work and level of learning achieved indicate that substantial numbers of children at the Standard 7 level have not gained basic competency in reading and mathematics.

4.02 Irrespective of its condition, primary education is the most important of all the stages of education. This is true in several senses. In contemporary Botswana there are ten times as many primary school pupils as secondary, and the primary schools reach out into communities which are as much as 200 miles from the nearest secondary school. Primary education is the foundation on which further learning is based, and opens up to the young person a range of opportunities for further study and work which are closed to the uneducated. It is in the primary school years, influenced to an important degree by the school itself, that the child's character and abilities take shape and many of the habits and attitudes of a lifetime are formed. From the point of view of nation-building it is quite largely through the primary school that the individual child and perhaps even the local community itself derive their sense of belonging to the wider society of Botswana, and come to understand and appreciate the full meaning of the national principles and philosophy.

4.03 It is for this reason that in planning the future development of primary education Government must recognise that it is planning a truly national system to serve all Botswana's children. Essentially there should be one system of primary education in Botswana and resources should be fairly distributed throughout that system.

4.04 Until now the system has not been a truly national one and its power to foster national integration and unity has thereby been weakened by divisions.

(a) One major breach in the principle of a single school system for Botswana has been made by the English medium schools, and the Commission notes with approval the recent measures to remove from these schools the fee subsidy which was tending to create a class of privileged Batswana at public expense. These schools should now be placed under non-profit-making trusts outside the public sector, and we suggest that the publicly owned buildings and sites should be leased to the trusts.

(b) A second category of schools outside the public sector has been unaided schools, often started by communities on a self-help basis. This praiseworthy contribution to the expansion of education should be regarded as a purely temporary phenomenon, bridging the gap until Government is in a position to fulfil entirely its obligation to educate all young members of Botswana society. We propose (paras 4.16, 4.29) a phased take-over of these schools into the public sector in the early 1980s.

(c) The third category of non-Government schools is the small aided sector of church schools. We anticipate that at some future date these schools will by the agreement of both parties become full Government schools. We hope that rather than attempting to expand their stake in primary education any further, the churches will concentrate their future educative efforts in the areas of youth activities, vocational training and adult education.

4.05 The principle of a national system of education should apply in the field of special education as well. The country has a responsibility to provide education for all its citizens, including those who are handicapped. The Commission believes that, to the greatest extent possible, education should be provided for handicapped children within the main stream of public education. Where the severity of some children's handicaps makes it necessary to provide education for them in special schools, these schools should offer education comparable to what is provided in the regular primary system. The misfortune of handicaps should not prevent children from obtaining a good education.

4.06 The distribution of educational resources throughout the country at the primary level is at present inequitable, and this poses a threat to the principles of national unity and *Kagisano*. The extent of the inequity in the distribution of teachers and physical resources is shown by Campbell and Abbot in their paper for the Commission (Annex 6). In general the pattern is one of poorer provision in remote and rural areas than in large population centres, and this disadvantage of remote schools is only partially offset by their frequently more favourable teacher-pupil ratio (stemming from lower enrolments, reflecting sparse population). The poorer facilities available in rural areas contribute to poorer performance on the secondary selection examinations. This prevents children in these areas from having a proportionate share of places in secondary and higher education and ultimately from getting well-paid jobs. This runs counter to the Government's basic policy aims.

4.07 In physical resource terms, Government has already begun to improve facilities in the rural areas through its Accelerated Rural Development Programme and the donor-assisted primary school building programme. Many rural schools are still poorly housed however, and many communities still lack schools altogether. As we suggest later (paras 4.16-4.18), this major challenge must be squarely faced in the next decade so that schools meeting certain minimum standards become available to every community.

4.08 Removal of the teacher imbalance is of course far more difficult, because in a democratic society like Botswana it must occur insofar as possible through inducement and persuasion; or, if a measure of compulsion be found necessary, then sacrifices should be fairly shared. Remote areas are likely to be less attractive to the majority of teachers because of the lack of amenities and distance from teachers' own homes. Nevertheless the children living in such areas have an equal right to a good education and ways must be found to provide trained teachers for remote schools.

The Commission recommends the following new measures to achieve more equitable distribution of trained teachers:

Teachers graduating from the training colleges should be required in future to spend at least three years out of their five year period of bonded service in remote schools. (R-1). *

In the case of teachers already serving, a regulation should be introduced that teachers below say the age of 35 on January 1st, 1978 will only be considered for promotion when they have served in remote area schools for at least two years. (R-2).

Special admission quotas should be reserved at the teacher training colleges for candidates from remote rural areas on condition that where such candidates are admitted on concessionary terms, they should agree to spend the whole five year period of their bond in their home area. (R-3)

* The numbers following each recommendation refer to the recommendation's number in the summary list at the end of Chapter 9.

Responsibility of Parents

4.09 We shall mainly be discussing in this chapter the education of young children in primary school. However we stress at the outset that education of the young is a joint responsibility of the school, community and parents. Boys and girls do most of their early learning among relatives and neighbours, and the educational support of the child's immediate community in terms of the interest shown in the child is important. Parents should be encouraged to appreciate the necessity of proper diet in infancy and the value of talk and play with their young children. As children grow older parents may assist with 'school readiness' by sending them to nursery schools where circumstances permit. We shall not in this report make recommendations about organised pre-school education, since we believe that it would be premature for Botswana to think of making any major public effort in this field. Our general view is that voluntary organisations and self-help groups should be encouraged to establish nursery schools where there is a demand for them. But parents should be aware that to leave their children in private day-care centres without proper supervision could well harm their children's development significantly. Once children are at primary school, the role of the parents is just as important, in ensuring that they go to school on time, are adequately fed and are not overtaxed with household duties especially in term-time. Parents should take a general interest in their children's education, visit the school, and hold frequent discussions with teachers. Parental encouragement contributes importantly to progress in schools.

4.10 In addition to their individual responsibilities as parents for the educational progress of their own children, adults also have collective responsibilities towards the schools, in their communities. This calls for a willingness to give time to school matters through parent-teacher associations and to contribute to the physical upkeep and maintenance of the premises by labour and financial contributions.

QUANTITATIVE DEVELOPMENT OF PRIMARY EDUCATION

4.11 Primary education has expanded rapidly, particularly since 1973 when school fees were reduced. In 1976 there were, according to offical Government statistics, some 126,000 pupils in 335 schools, an increase of 54 percent or 11.5 percent per year since 1972. It is well known, however, that the official statistics are incomplete and there are many unaided schools of various sizes springing up and waiting to be taken over by Councils, especially in the rural areas. We ourselves have visited many such schools and the Commission's information indicates that there may be as many as a hundred schools and between 5 000 and 10 000 pupils that do not appear in the official statistics.

> *The Commission recommends that a special effort be made by councils, district education officers and the Central Statistics Office to compile a complete list of unaided schools as a basis for future planning.* (R-4)

4.12 The recent rapid growth of primary education has been influenced by Government actions, such as the reduction of primary school fees, the launching of an accelerated school building programme, and the provision of school meals under the World Food Programme. However it has not been subject to Government planning, direction and control. Government has had no firm plans for the expansion of primary education by any set date. The number of schools to be taken over and the teachers to be employed have been decided in haphazard fashion, and unaided schools have been opened without the knowledge of the authorities, let alone their sanction.

4.13 The recent establishment of the Unified Teaching Service, coupled with our own recommendations later in this Report for a more coordinated approach to the administration of primary education, now provide the opportunity to bring more order into the development of primary education. However, complete control over development will not be possible until schooling is made compulsory, which we do not advocate at present for the reasons we state below. It will be possible to plan the number of schools and classes with some precision, but not the exact number of pupils, since enrolment may fluctuate with weather and economic conditions.

4.14 According to the information at the Commission's disposal the 126 000 occupied primary school places are equivalent to 93 percent of the estimated 135 000 children in the 7 - 13 age group in Botswana (corresponding to seven standards in the primary course). The number of occupied places at Standard 1 is in fact higher than the number of seven year olds or any other age group to which it should relate. Both these figures in fact overestimate the coverage of primary education in Botswana because large numbers of children outside the 7 - 13 age range are in primary school. Table 4.1 shows the coverage of the primary schools in 1976, based upon official statistics.

Table 4.1

Age Distribution of Primary Students and Proportion of Each Age Group Enrolled, 1976

Age	Primary School Enrolment in 1976	Proportion of age group enrolled (percentage)
5 year olds	1695	7.8
6	9766	44.0
7	17652	81.2
8	20562	96.3
9	17188	83.2
10	15859	82.3
11	12477	68.1
12	10844	62.1
13*	8743	52.4
14*	6455	40.3
15*	2831	18.0

* Primary school only. There would also be some children of these ages in secondary school.

Source: Education Statistics and National Commission on Education

4.15 The immediate task ahead is to consider how and over what period, primary education within the public system can now be extended to the whole primary age group in Botswana. The Commission considered that in planning the expansion of the education system as a whole, the first priority is the extension of primary education to those who are excluded at present. It will not be possible to speak of the achievement of unity and social justice in Botswana while many children are deprived of access to school. Before considering the expansion of the coverage of the education system, two 'prior commitments' should be borne in mind.

(a) The school-age population is growing at an estimated 3.75 percent per annum in Botswana and it will be necessary for primary intake and enrolment to grow at the same rate simply to maintain the same proportion of the age group entering and attending school as at present.

(b) When there is a dramatic surge in enrolments in Standard 1 as happened in 1973, it takes seven full years for this to work its way through the system. The 'bulge' in Botswana's primary system has reached Standard 5 at the beginning of 1977. Botswana has to provide teachers and classrooms to permit this rise in enrolment to continue to Standards 6 and 7 in the next two years, and this means that even with no increase in intake to Standard 1 over 1976 levels, about 30,000 more places will be required in 1979 than in 1976. The commitment to allow the children already in school to complete their courses is clearly a first priority claim on resources.

4.16 There are several dimensions to the problem of extending the provision of primary education to the point where it is universally accessible. First of all there is the question of unsatisfied demand for primary places. There are comparatively large numbers of people, mainly in the rural areas, who are prevented from going to a council school because none is within walking distance of their homes. Many isolated communities have responded by setting up unaided schools at their own expense. Second, there are others who are excluded from school attendance on grounds of age. Third, there is the problem of those for whom places would be available but who do not attend. This raises the problem of compulsory education and also involves consideration of the charging of school fees. The Commission will comment on each of the issues in turn before outlining its proposals for the expansion of primary education. We will then consider the all-important question of resource availability - buildings, equipment and teachers.

Physical Access to Primary Schools

4.17 The first problem we want to discuss is the question of the geographical coverage of the primary school system. The broad pattern in Botswana has been to have large schools in population centres and this has accorded fairly well with traditional residential patterns. As a result, the average size of primary schools in Botswana is about 350 - 400 pupils, which is high by African standards and quite remarkable for such a sparsely populated country. Local councils may themselves have been dissatisfied with this pattern but financial constraints have prevented them from supporting schools in the more rural areas. Now however, the problem has to be faced that if the public primary system is to be made accessible to all, as the Commission believes it should be, public schools will have to be established, or unaided schools taken over, in isolated rural villages. The necessity for this is underlined by an observable trend for families to spend more of their time at the lands and cattle posts in accordance with Government's own policy of encouraging crop farming and protecting grazing resources. One approach which Government will naturally follow is to rationalise population distribution by encouraging people to live in communities large enough to justify the provision of public services like schools. But this policy must be complemented by Government's recognition of its responsibility to provide education to rural children through a more scattered network of rural schools. To meet this objective would mean taking over viable unaided schools and building additional schools in communities that now have none. Such action would have implications for teacher supply and posting and for the size of the supervisory force needed, as will be discussed in other chapters.

4.18 Provision of schools to all rural children should be interpreted to mean that Government and the local councils are obliged to provide teachers and schools whenever there are sufficient numbers of children to justify them. Other African countries have approached this problem by providing one-teacher and two-teacher schools to serve a range of ages and standards, and the Commission suggests that Botswana consider adopting this solution in remote areas. The arrangement requires gifted teachers with special training in the techniques of handling several standards in one classroom and of organizing multiple groups of children working at different levels and on different subjects. Teachers should be advised on how to use older and abler students to supervise and assist younger ones. Special recognition in terms of pay and promotion would be needed for teachers in these schools. Schools broadcasting could provide particularly valuable assistance and support to teachers in one- or two-teacher schools. Materials that are to some extent self-pacing should be develeoped, and small schools need an extra allocation of materials, especially of reading materials of graded difficulty. Single-teacher schools are by no means an ideal solution, but they are feasible, and represent probably the best way of taking primary education to remote communities. The other possible approach in Botswana, use of boarding schools at primary level, would have to be reserved for special cases in view of the high cost of boarding and the possible harmful effects on young children of separation from their parents.

> *The Commission recommends that schools be provided in areas where there are (and promise to be in the future) at least twenty children of primary age who have no access to other schools. Two-teacher schools should be provided where there are more than thirty pupils.(R- 5)*

4.19 Next we come to the question of educational provision in urban areas and the shortages of places there. Clearly a delicate balance is necessary between the duty to provide an adequate minimum of places in the towns to serve children living there, and the danger of attracting families into towns in search of a better education. The Commission believes that Government can avoid the danger described to some extent by providing more rural schools and by a fairer distribution of teachers and other resources. Having taken these measures, it will be faced with the obligation to provide education for those who have come to town for other reasons. Whilst Government may deplore some aspects of the growth of the urban population, it must face the necessity of providing sufficient places in towns. Otherwise the most deprived children in Botswana might be found in future urban slums. The presence today of out-of-school children on the streets or tomorrow of a large urban population of unschooled adolescents could constitute grave social dangers.

Age of Attendance

4.20 The issue of age of entry into primary schools gave rise to many comments in submissions to the Commission. There are multiple arguments both for and against retaining the present age range (5+ to 8+). Lower entry age is preferred by parents living in towns while rural families would be benefited by a higher permitted age of entry. The issue is further complicated by the absence of compulsory birth registration, especially in rural areas. The arguments for retaining the present low minimum entry age are:

(a) children benefit socially and academically from early attendance at schools. (The Commission's achievement study suggests that younger pupils at the Standard 7 level do tend to perform better than their older classmates, although the younger children tend to live in urban areas and have more advantages);

(b) Mothers in urban areas would have to defer employment outside the home if children could not go to school at an early age;

(c) Lower entry age means that those children who reach secondary level are younger and hence more amenable to school discipline (the problem of teenage pregnancies and dropouts has been cited in evidence to us as a disadvantage of having older secondary students);

(d) Children from very poor families benefit earlier from the school feeding programme if entry ages are kept low;

(e) Earlier entry age means secondary and higher-level graduates will be available for work somewhat sooner.

4.21 There are counter-arguments to point (a), since evidence from some industrialized countries suggests that children there do not gain unique advantages from earlier school; but it is not clear that such findings can apply to children in developing countries who lack a strong learning environment in the home. With regard to (b), there is the option of placing children in pre-school day care centres. In connection with points (c) and (e) above it should be borne in mind that the average age of entry has decreased by approximately three years in the last decade, as will be discussed below.

4.22 Arguments for raising the entry age are as follows:

(a) Rural children who live far from school cannot walk to school until they are older than six;

(b) Secondary schools give preference to younger candidates in selection and admission, which works to the disadvantage of rural pupils.

(c) A more practical orientation could be provided in primary school if children were older and stronger.

(d) Older children are more mature and ready to learn and can take more responsibility for their own learning. Very young children in Standard 1 require too much supervision from the teachers.

(e) School leavers after Standard 7, who may be as young as 13, are too young to enter the labour force and therefore face a period of years after school when they cannot fend for themselves.

The first point is undoubtedly a problem, but this would be solved by raising the maximum entry age, rather than the minimum. However, this leads to the problem in (b). Point (c) is of questionable importance, since even young children can benefit from practical orientation and we do not recommend specific vocational training in the primary schools for pupils of any age. As noted already the pedagogical arguments on age of entry (point d) are contradictory, but we are impressed with the arguments against admitting very young children to primary school. (Point e) on the 'school leaver problem' is of great concern to many. The data in Table 4.2 indicate the degree to which the average age of entry has declined in the past ten years, which explains the concern expressed over very young school entrants and leavers.

Table 4.2

Age Distributions and Median Ages of Pupils in Standards 1 and 7, 1966 and 1976.

	Pupils in Standard 1			Pupils in Standard 7	
	1966	1976		1966	1976
Percentage Aged			Percentage Aged		
5	1.3	6.9	12	2.7	17.0
6	11.6	33.9	13	5.6	29.8
7	19.5	37.0	14	11.9	29.9
8	26.0	18.9	[illegible]	17.5	12.8
9	25.0	2.3	16	21.5	4.4
10	10.3	0.4	17	16.4	1.4
over 10	6.3	0.6	over 17	24.4	4.7
median age	8 yr 8 mo.	7yr 7mo		16yr 0 mo	14yr Omo.

Source: Education Statistics and National Commission on Education.

It should be noted that the date of the school census is April 1. One should therefore deduct three months from the median age of those in Standard 1 to obtain the median age at first entry to school and add nine months to the median in Standard 7 to get the age of school leavers entering the job market. In effect one can say that the average child entering primary school now is just seven, and the average child leaving is almost fifteen. The Commission's recommendations on increased access to junior secondary education (para 5.39 to 5.50) are addressed to the problem of early school leaving.

4.23 The Commission has weighed the above arguments carefully. Since urban and rural families are affected differently by age-of-entry regulations, our recommendation is that the present flexible system be continued, with a slight increase in the minimum entry age from 5+ to 6 years on January 1. Instead of being a minimum of six years old by June 30 in the year of admission, children should be six years old by January 1 of the year of admission. The maximum entry age to Standard 1 should also be increased slightly so that any child who has not turned 10 by January 1 in the year of entry should also be admitted. In order to reduce any discrimination against rural children, who tend to enrol later, and to avoid waste of able young people, the maximum age of entry to Form I should be eliminated and head teachers should not be permitted to discriminate against older candidates in making selections for admission.

> *The Commission recommends that the range of entry ages should be raised slightly from the present 5+ to 8+ to "at least 6 but less than 10 on January 1 of the year of entry". (R-6)*

4.24 In cases where an unaided school is taken over by a Council, children already in school are allowed to continue, regardless of age. We suggest that wherever a Council or aided school is opened in an area not previously served by public facilities, the admission regulations should be relaxed somewhat, for a period of two years, to permit older children who have not had a chance to enter school to do so.

> *The Commission recommends that when new Council schools are opened, children up to the age of twelve should be allowed to enter for a period of two years after the opening of the school. (R-7)*

The Question of Compulsory Education

4.25 Our next concern is those parents who do not send their children to school, even when places are available. Very often the reason may be economic; they find it difficult to afford fees and the household economy depends on the services of children. Every effort should be made to persuade parents to give their children school experience, but it is still too early, in the Commission's view to make primary education compulsory (as distinct from generally accessible) in Botswana. Before school attendance can become mandatory several conditions must be met. Compulsory education requires that well over 95 percent of the population will attend school willingly and that public opinion will strongly support sanctions against the reluctant minority. It also presupposes that Government has the means to compel those who are not keen to send their children to school to do so, even in remote areas such as the Kgalagadi. It requires too a uniform age of entry, for which Botswana is not yet ready, in view of most of those submitting evidence to the Commission. The Commission therefore suggests that the way to approach compulsory education is on an area by area basis, with those local councils that feel ready and able to demand compulsory attendance in their areas being free to approach the Minister of Education for his agreement and the necessary powers to enforce it.

> *The Commission recommends that compulsory education should be postponed in Botswana until conditions are suitable for it, but that local councils should be free to introduce compulsory education, on a District by District basis, as they determine they are ready to do so. (R-8)*

Incentives to School Attendance

4.26 One of the most important incentives for parents to send their children to school has been the school feeding programme. The Commission has been greatly impressed by this programme and by the clear benefit to children's health and vitality that results from it. At present parents make a contribution to the cost of employing cooks, but the main cost is met through the World Food Programme. Considering the poverty of many rural families, 45 percent of whom were below the official poverty datum line, the Commission hopes that generous aid provided by the World Food Programme will be continued beyond the termination of its present phase in 1979.

4.27 Fees, on the other hand, are a barrier to school attendance as was shown by the decline in attendance after fees were raised in 1967, and the surge of enrolments in 1973, after they were halved. As primary education approaches universality, the case for charging tuition fees grows weaker, especially in view of the costs of collecting fees and the administrative burdens on teachers and councils. Removal of fees will probably cause some enrolment increase, although the size of the increase is uncertain.

To avoid unnecessary strains on the system, we suggest that fees should only be abolished after the 'bulge' in enrolment has passed through Standard 7 in 1979. We should point out that 'fee-free' education still has to be paid for, but through taxes on the whole community rather than by charges on parents.

The Commission recommends that school fees should be abolished from 1980 (R-9)

4.28 To summarise, the major pressure for increased enrolments in primary education that the Commission foresees are:

(a) Steady growth of enrolments of about 3.75 percent per year due to population increase; (school-age population is increasing more rapidly than total population);

(b) Expansion of Standards 6 and 7 as the much larger enrolments in the lower standards progress upwards;

(c) Increased enrolment due to removal of school fees;

(d) Extension of public schools to smaller communities that now have unaided schools or no schools.

4.29 In view of the physical constraints in terms of buildings, furniture, equipment and teachers, Government should deal with these sources of demand for places on a phased basis, not all at once.

The Commission recommends the following schedule of steps to achieve universal primary education:

1977 - 79:	*Concentrate resources on the bottlenecks at Standards 5, 6 and 7 so that those already in the primary schools may complete their courses.*
1980:	*Abolish school fees from 1980.*
1980 - 82:	*Launch a phased programme of taking over unaided primary schools, starting with the best.*
1983 - 85:	*Provide schools for smaller communities that lack them. (R-10)*

Supply of Classroom Space and Furnishings

4.30 The feasibility and phasing of any development programme must largely depend on the adequate supply of physical resources and of teachers. Unfortunately, as far as supply of buildings is concerned, the present situation is already one of serious backlog. In 1974 Government launched a major programme to provide services to rural areas, known as the Accelerated Rural Development Programme, which included generous and substantial aid for the expansion of primary education, and is considering an extension of this programme.

4.31 Despite these efforts, however, there were still only 2271 classrooms throughout the country in 1976 against 3918 classes, which left 1647 classes without accommodation of their own. In 986 cases, classes worked an afternoon shift in classrooms which had been used in the morning, leaving 661 classes to meet in the open air. It is our fear that the situation may become rapidly worse since the number of new classrooms needed is currently growing at over 300 per year compared with an average rate of construction of slightly over 100 classrooms per year in the period 1973-75. The Government has allocated development funds of P16.5 million for primary education over the Plan period, but this does not meet the full requirement estimated by Government at P20 million nor does it take account of all the additional needs the Commission has identified. Bugetary constraints are cited as the reason why the full amount needed cannot be allocated, but the Commission notes that a programme likely to total P15 million has recently been negotiated with the World Bank for post-primary education. We cannot ourselves conceive of any capital programme in the education field having priority above providing decent accommodation for those children sitting in the sun, rain and wind.

The Commission recommends that Government should review capital spending priorities so as to guarantee classroom space to every school child within five years. (R-11)

4.32 The immediate need is to allocate sufficient funds and organisational services to get classrooms built and fully equipped for every primary child now studying in the open. The main responsibility must be on Government to finance and organise this construction work, but self-help efforts by communities in putting up classrooms should be encouraged, systematised and guided. Whilst all schools lacking classrooms should be included in a phased programme, those communities prepared to use self-help should receive priority assistance.

The Commission recommends that rural communities showing some initiative in putting up buildings should be given priority in Government expansion plans and should be the first to have their schools taken over by Government. and to get newly qualified teachers posted to them. (R-12)

4.33 It must unfortunately be accepted that at some schools there will have to be an afternoon shift for the time being. The double shift system has been criticised by parents and politicians as a poor alternative, particularly where the second shift has to be taught for less than a full five hours per day, and teachers are generally not enthusiasic. But we are convinced that from the learners' point of view even four hours under normal classroom conditions is better than five hours in the open. The afternoon shift should be eliminated as soon as possible by provision of additional classrooms, but only when the minimum provision of a classroom place for every primary-aged child wanting to attend school has been made.

4.34 Where a new classroom is built, it should be fully furnished immediately. However, there are instances of classrooms existing without proper desks or furniture, so that pupils must sit on the floor, holding their exercise books in their laps or else laying them on the floor and kneeling down to write. This is uncomfortable, results in untidy work, and books and materials are easily spoiled. We cannot see that this situation is tolerable in any country valuing its children's education highly.

> *The Commission recommends that adequate furniture should be provided for all existing classrooms by the beginning of of 1979 and provision for furniture should automatically accompany the construction of all new classrooms.(R-13)*

Teacher Supply Constraints

4.35 Undoubtedly the most serious problem at primary level is the shortage of good teachers. It is a problem both of deficient quantity and of unsatisfactory quality. Appendix Table A-8 shows how the number of untrained teachers has grown, to reach 1487 or 38 percent of the teaching force in 1976. The situation is bound to get much worse before it gets better, because even ignoring teacher wastage the number of teachers needed for new classes will be over 300 per year in the next few years, while the output of the training colleges at their existing capacity will only rise from 221 to 285 between 1976 and 1979. In fact it is clear that universal access to primary education by 1985 can only be staffed if the exceptional measures recommended in Chapter 6 are adopted.

4.36 The quality of teachers, both trained and untrained, leaves very much to be desired. The educational background of teachers is poor. Of the 1487 untrained teachers in 1976, 1204 or 81 percent had only a Standard 7 education themselves. Of the 2434 trained teachers in the same year, 1365 (56 percent) had received only Standard 7 education before entering training colleges. Over half of the teachers in the Commission's survey indicated that they had some difficulty in speaking and understanding English. Although many of these teachers give devoted service, Standard 7 education does not provide them with a background of sufficient depth for professional teaching.

4.37 Although the qualification required for entrance to the training college has now risen to Junior Certificate level, the colleges cannot recruit all the candidates they need from Form III and take a high proportion (about 35 percent of recruits in the period 1974 to 1976) from the ranks of serving untrained teachers.

The Junior Certificate leavers they do get are from among the poorest passes on the examination, reflecting a low priority for teaching both in students' choices and in the process by which candidates are allocated to post-JC places.

4.38 Generally speaking even trained teachers do not appear to have been well prepared in the training colleges for their tasks as teachers. They appear to be given a great deal of background education and pedagogical theory and far too little development of the practical skills needed in the classroom, such as those of presenting lessons and organising the timetable. Once in the classroom situation teachers often lack professional supervision and help, and without such support the performance of some teachers quickly deteriorates.

4.39 Primary schools suffer from high teacher turnover, which creates an undesirable instability in the learning environment. The Commission's achievement survey found that 54 percent of primary school teachers had taught at their present school for two years or less (42 percent of teachers at Standard 7 level). Further analysis indicates that the average annual turnover of teachers was approximately 30 percent, and that the problem was more severe in small and medium sized villages than in the towns or district headquarters. Since much of this turnover is movement of staff between schools or temporary absences for maternity leave andother reasons, actual loss of teachers from the teaching force is much lower.

4.40 We discuss teacher morale and the recruitment and retention of teachers in more detail in Chapter 6 of this Report, but we shall refer to teacher competence and the role of the teacher throughout our discussion of primary education.

CONTENT AND QUALITY OF PRIMARY EDUCATION

Qualitative Objectives

4.41 The task of the primary school is to provide a stimulating environment in which children can grow and develop their capacities as individuals and as members of the family and community. Primary education should provide the foundation of basic competencies that will prepare the child for continued in-school and out-of-school learning and for social and economic life in a modernising society. Botswana primary schools should aim:

(a) to develop in children the ability to express themselves clearly in Setswana, both orally and in writing.

(b) to ensure that children acquire a basic command of written and spoken English and of mathematics, which are the tools of further learning in school and are needed in many jobs. In teaching language and mathematics, schools should encourage children's sense of curiosity about the world and understanding of how to find out more about it.

(c) to give children the necessary knowledge and ability to deal with the social and physical environment in which they live. This includes learning about their community and gaining basic knowledge of the laws governing the natural world around them. It also involves working with their hands and approaching simple problems in a practical way.

(d) to give children an appreciation of their culture, including language, traditions, songs, ceremonies and customary behaviour.

(e) to give children a range of educational experiences that will enable them to discover and develop their own special interests, talents and skills, whether these be manual dexterity, physical strength, intellectual ability, artistic gifts, organising and leadership skills, a special capacity for friendship, or some other distinctive quality.

(f) to provide children with a set of moral standards, personal convictions and loyalties that will make them good members of their family and community, and responsible citizens of Botswana.

4.42 This list of aims of primary education is very broad. But even though these aims are more wide-reaching than the present aims of primary education, their achievement would not require a more crowded syllabus. Indeed it would be possible to reduce the number of items in the present syllabus and still achieve the stated goals. It is our contention that all children need broad and balanced foundations whether they are going on to secondary school or not. For example, any well-rounded person needs the skills of literacy and numeracy, an understanding of his physical environment and of his culture, and an ability to work with his hands. We cannot accept that any of these areas are in themselves 'academic' or 'irrelevant' and should be cut out of the curriculum at primary level. However, it it unfortunately true that the content of these subjects is too often dealt with in an abstract way, divorced from any real life context. There is in general too much emphasis in schooling on learning fact and theory, and not enough on applying knowledge and principles to actual situations with which pupils may be confronted. Our view is that everyone needs intellectual skills such as the ability to calculate, to reason, to distinguish categories and so forth; and everybody needs the ability to apply their knowledge and skills in practical social and economic situations. The agriculture graduate full of theoretical knowledge who cannot solve a practical farming problem, or the practising farmer who cannot reckon the amount of seed he needs, are equally miseduated.

4.43 For this reason we are strongly opposed to identifying at Standard 5 or 6 two groups of children: one group, the majority, for whom it is decided that primary education is going to be 'terminal' and who will therefore be deprived of the chance to study subjects like language and arithmetic that would get them a place in secondary school; the other group, the fortunate minority, whose education will be 'preparatory' for a journey up the educational ladder to well paid government and private sector jobs. We reject this kind of division for two reasons, first, all adult jobs require a combination, though in different degrees, of theory and practice. Second, even if this were not so, pupils develop at different speeds and it is not possible to predict with accuracy how a young primary school pupil will develop or what kind of a future may await him. The best that Botswana can do for her children, therefore, is to give them all a broad and balanced preparation in primary school which will enable them to respond in a positive way to whatever means of earning a living or opportunities for further learning may arise.

Making Primary Education More Practical

4.44 Our conception of 'preparation for life' is wider than that expressed in some of the submissions to the Commission. Many people who argued that education should 'prepare for life' (as we ourselves strongly believe) interpreted this so specifically as to advocate courses in carpentry, bricklaying, farming, etc., at primary level. Such proposals seem to us to lose sight of many factors, amongst others:

(a) the very low age of primary school pupils, who, at the age of 10 to 14 are still too physically immature to handle heavy or dangerous tools, at least without careful supervision;

(b) the cost of skill training of this kind, involving as it does the provision of tools and consumable materials, special buildings and stores, and additional staff to handle the smaller teaching groups necessary;

(c) the lack of teachers with the required skills and experience of production activity, and the absence of facilities at present to train such instructors;

(d) the great difficulty of simulating real working conditions in a classroom situation where 30 or more pupils are being instructed;

(e) the unreality of assuming that all children in a primary class, both boys and girls, would want to pursue an identical specialised trade; yet the impossibility of providing more than one craft in a small primary school;

(f) the limited number of jobs at present available in the economy for specialised craftsmen.

This last point is most important because demand for any skill provided to large numbers of primary leavers would be very quickly satiated. This argues for provision of general practical orientation that can serve as a basis for a wide variety of specific training alternatives (in schools or on the job) after primary schooling. At present primary teaching is dominated by a verbal-abstract approach. This must be changed to an orientation toward the concrete and the practical.

4.45 Our own view is that primary education should certainly be practical in the sense of giving all children generalised practical skills and manual dexterity; familiarity with simple tools and with different kinds of materials, plants and animals; experience of making things; practice in organising projects and taking decisions; and a knowledge of different occupations and of community life. These kinds of skills, allied with ability in language and calculation, provide a good foundation for all kinds of later work. They are also the kinds of abilities needed in the home and the community, and are a sound basis for later training or further education.

4.46 This practical orientation of the curriculum should be given to the whole primary course and be manifested in all areas of teaching, rather than take the form of training in trades or be encapsulated in one or two 'practical subjects'. Practical education is an approach, a method, an attitude of mind rather than a specified set of manual skills. From the very beginning therefore the learning of abstract concepts should be facilitated by doing, and the basis of manipulative skills should be cultivated through play. Through the medium of modelling in sand and clay and the use of wooden blocks, abstract ideas can be expressed in concrete form and pupils can acquire a sense of colour, length and breadth, shape and volume, texture and weight. Models can assist understanding in geography, and dramatic presentation can be used in history lessons. We see a practical approach to the teaching of all subjects as the best way of introducing subject areas like agriculture and home economics in the primary schools. Full scale agriculture is impossible to pursue at this stage, for the pupils do not have the strength or stamina for proper farming and all kinds of organisational problems arise. But it is possible to familiarise children with the vocabulary and concepts of farming through their reading lessons in Setswana, to get them to measure plots, weight produce, and calculate yields (mathematics), and to use the garden for practical lessons observing germination of seeds, growth of plants, flowering and fruition (biology)

The Commission recommends that the primary school curriculum should be made more practical for all children. This should be achieved by giving a practical orientation to the teaching of all subjects. Vocational training is not appropriate in the primary school. (R-14)

Curriculum Development

4.47 The Commission notes that there is no body responsible for coordinating the curriculum development activities carried on at Ministry Headquarters by the In-Service Team and various curriculum subject panels, at the teacher training colleges or at the Univeristy. There are a number of worthwhile curriculum development efforts under way but these operate without general policy direction or coordination between subjects or between educational levels. Furthermore, there is little or no link between most curriculum development activities and the work of the former Regional Testing Centre. In Chapter 8 the Commission recommends creation of a new Curriculum Development and Testing Unit, which would perform these functions.

4.48 In putting forward its general view on the syllabus and curriculum of primary schools, the Commission urges that the distinction between the curriculum and the syllabus should be borne in mind. The curriculum is all the planned learning experiences that the school provides for the child and includes learning outside the classroom through games, assembly and other social activity as well as class lessons. It should include participation in community occasions, observation of local craftsmen at work, and visits to places in the neighbourhood. The way in which teaching and learning are conducted and organised are also important aspects of the curriculum. The syllabus on the other hand comprises the subject matter to be learned and topics to be covered.

4.49 In Botswana's approach to curriculum improvement, and in her teacher training colleges, the emphasis should be as much on curriculum development as on syllabus revision. Thought should be given to the social, moral, physical and emotional development of children, to the need to instil a commitment to Botswana's national philosophy and principles, and to the kinds of activities and experiences that will promote these. In part this is a matter of balancing desk-learning with other activities like games and hobbies, educational visits and community service. In part it is a matter of the way in which classroom subjects are taught, the way the class is organised and the children are grouped, and the relationship between teachers and children. The Commission would like to see far more attention given in the training of teachers to the methods and the organisation of classroom work, and to social relationships within the school, for these are quite as important in the education of the child as the syllabus itself.

4.50 So far as the mode of teaching in Botswana's primary schools is concerned, we welcome the attempts of the training colleges, the In-Service Team and others to promote child-centred approaches encouraging learning through activity and discovery and experimenting with individualised approaches. At the same time the need for balance and for different approaches in different situations must be recognised. Some teachers are confident enough to experiment and to allow their pupils fairly free rein. Others, however, are poorly educated and lack confidence. These teachers may be confused by methods which produce excellent results in more sophisticated hands, and they will be served best by rather straightforward instructions and guidance, and simple procedures to follow. The basic defect in many classrooms in Botswana today is not so much a lack of creative innovation but rather the absence of order, organisation and firm direction. In most schools the route to progress may be to get the basics right, like proper preparation by the teachers, classes starting punctually, adequate equipment and materials, and reduction of teacher absenteeism. Although the best teachers may be able to work far beyond this basic level and should be encouraged to do so, care should be taken not to ask more of the majority than they are capable of producing.

Syllabus Revision

4.51 As regards the syllabus and materials, several changes are necessary, and the Primary Task Force has drawn attention to many of these in its report (Annex 4). It would be naive to think that changing the syllabus in its entirety would solve all the problems of education and our own general view is that the syllabus can be greatly improved without being totally scrapped. Our major observations on the possibility of improvement are as follows:

(a) The present syllabus is too crowded and attempts to cover too much ground, both in terms of the number of units and of their composition. Recognising that teachers vary so widely in ability and training, we would like to see a basic core established which is within the capacity of all teachers, leaving the abler teachers and children to pursue subjects in more depth and breadth. This principle should be accepted in fixing priorities both within each subject area and between subject areas, where we suggest concentration on mastery of the basic tools of learning (literacy in Setswana and English and numeracy) as the first prerequisite.

(b) To help give structure to the present syllabus and to provide a basic framework and guide for new and inexperienced teachers, the unit framework should not be totally abandoned, but should instead be substantially modified. We propose a minimum basic core within each syllabus unit covered in a very ample period, which would be sufficient for even the least experienced teachers. The better and more experienced teachers would receive suggestions for supplementary work.

(c) The order in which topics are learned should be modified to start from knowledge which children already have, and work outwards from the known to the unknown.

(d) With the same thought in mind, readers and text books should be revised to use more simple language and to reflect the new orientation of the syllabus. The same is true of some teachers' guides and instructions for examinations.

(e) Whilst the worst irrelevances have already been removed from the curriculum, there is room for more concentration on Botswana and Africa, and less on Europe and America in the social studies areas of the syllabus.

(f) Every teacher must have a copy of the syllabus in his possession, as well as teachers guides suggesting approaches to handling the syllabus in the classroom.

The Commission recommends that the primary school syllabus should be revised and that there should be:

Concentration on Setswana, English and Mathematics;

A basic core and supplementary work within each syllabus unit;

A re-ordering of the sequence of learning, which should progress from the known to the unknown;

Simpler language in readers, texts, teachers guides and examination instructions;

More concentration on Botswana and Africa;

Copies of the syllabus and teachers guides for every teacher. (R-15)

4.52 The Primary Task Force Report and other evidence submitted to the Commission have identified several problems concerning textbooks and reading materials. Amongst these are:

(a) Although the basic readers in Setswana are generally available in bookstores, there are difficulties of supply and distribution and it is common to find several children sharing one book.

(b) The basic Setswana readers are limited and need to be supplemented with additional reading materials for beginning readers. Very little has been published of this sort. Nor is there a suitable basic mathematics textbook in Setswana.

(c) English language textbooks prepared outside Botswana for speakers of English as a first language use a level too advanced for Botswana's children, for whom English is a second language and only used as a medium of instruction from Standard 4. Even though the level of difficulty of the subject matter (e.g. mathematics, geography) may be appropriate, the language of presentation is a barrier to learning.

The Commission recommends that Government:

Conducts through its field officers and local Councils a short-term survey of the availability of books and other reading materials in the schools, with a view to ensuring that all schools are adequately supplied by the beginning of the 1979 school year; (R-16)

Reviews arrangements for distributing and storing books and materials; (R-17)

Establishes working parties to survey books and materials currently in use in the different subject areas and to suggest modifications to existing materials or the preparation of new ones; (R-18)

Arranges the preparation and publication of more suitable books and supplementary reading materials in English and Setswana where these are shown to be needed. (R-19)

4.53 In addition to reading materials and texts there is a great need for other educational materisl to stimulate children's interest, to develop manual dexterity, and to provide fundamental familiarity with material objects, very simple tools, arts and simple crafts. Most important of all are paper, exercise books and writing materials for the children's use. Beyond these, posters and charts should be available in the classroom, as should art supplies (and displays of children's art work), and, depending on the level, wooden blocks and rods or somewhat more complex apparatus to support mathematics teaching (e.g. simple balances or geometrical shapes made of wood). Such materials are a means of making primary education more 'practical' and a better foundation for later life, as the Commission urges, and of introducing variety and interest into the classroom. Efforts by teachers to make their own simple and low-cost materials and apparatus should be supported.

The Commission recommends that:

The Ministry of Education reviews the basic needs for supplementary materials and takes steps to provide these to all primary classrooms; (R-20)

Adequate budget and staff support be provided for programmes in the teacher training colleges to train teachers to make their own teaching aids. (R-21)

Educational Broadcasting

4.54 Educational radio broadcasts, if they are coupled with high quality written materials, can lend considerable support to teachers in remote primary schools who cannot obtain frequent personal professional guidance. Broadcasts add variety and interest to the curriculum and can be particularly helpful in improving children's speaking. Further, programmes about social and cultural affairs aimed at school age audiences -- such as the former schools news broadcasts or simple dramatic presentations -- could make learning a more relevant and enjoyable experience. In practice however the schools broadcasts stick rather rigidly to the academic syllabus and because of weak radio reception in outlying areas and poor maintenance of radio sets, many of the rural schools which could benefit from educational broadcasts fail to do so. What is needed is closer coordination with the overall curriculum development effort in Botswana, better field support for the programmes in terms of distributing materials and servicing equipment, and more attention to evaluation of what is actually being achieved. Recommendations on schools broadcasting are made in Chapter 8.

Medium of Instruction

4.55 The normal practice at present is to teach in the medium of Setswana for the first two or three years of the primary course and then to switch to English for the remainder of the primary sequence. English is taught as a subject from Standard 1 and Setswana continues to be taught as a subject after the transition to the medium of English. The precise timing of these changes varies however according to the language competence of the teacher, and it is not uncommon to find some instruction through Setswana even in Standard 7.

4.56 The introduction of English as a medium as early as Standard 3, and the amount of class time allocated to English clearly discriminate against the national language. This effect is reinforced by the exclusion of the Setswana grade from the aggregate scores qualifying the candidates for secondary school selection. A hardly surprising result of this neglect of Setswana is that Batswana children frequently fail to attain literacy in their national language. The Commission's survey shows that a great many children express a preference for English over Setswana. The Commission feels strongly that every nation ought to give a prominent place to its language in its system of education. Few factors foster national identity more than a national language, and a vigorous national culture can only flourish if the young are fully articulate in the language through which this culture finds expression. There is also great educational advantage in learning literacy and other skills through the national language first, and in thoroughly mastering that language before moving on to another.

4.57 At present Setswana teaching appears to be oriented toward the Setswana papers set for the Primary School Leaving Examination, which emphasize knowledge of proverbs, idioms and figures of speech rather than reading, comprehension and writing ability in a "working" language (see Annex 2, page 11-12). The main objective of Setswana teaching should be the establishment of operational literacy, so that pupils can communicate effectively in the national language, and the examination should be changed correspondingly.

4.58 The teaching of Setswana must be supported by written materials in that language. We are aware that there is a serious dearth of Setswana literature in the country, and that the very few books used in Botswana schools were mostly written and published in the Republic of South Africa, whose variety of Setswana has been greatly influenced by Sesotho in construction, vocabulary and pronunciation. What is needed therefore is simple, graded Setswana story books produced in Botswana. The Commission recommends in Chapter 7 that the University should establish a Centre for Setswana Studies which could assist the development of Setswana reading materials.

4.59 *The Commission recommends that:*

Setswana should be used as the medium of instruction for the first four years of the primary course, with the transition to English taking place in Standard 5, by which time children must have become fully literate in Setswana; (R-22)

Setswana should be given more time in the school timetable, and should have the same status as English as a subject in the Primary School Leaving Examination and in the selection process for secondary school. In the interests of fairness, some adjustment of scores would be necessary for candidates from schools in non-Setswana speaking areas; (R-23)

English should continue to be taught as a subject from Standard 1, with the aim of preparing children for the transition to English as a medium of instruction at Standard 5; (R-24)

The Ministry of Education or other appropriate bodies should organise annual story writing and essay competitions, with rather substantial prizes. The best materials from these should be edited and compiled into simple readers for the primary grades. Collections of folk tales and songs might be obtained in the same way; (R-25)

Teachers with a talent for writing should be encouraged to undertake the production of readers and novels in Setswana, and might be released from teaching part-time to help them do this. (R-26)

Automatic Promotion

4.60 Perhaps the one subject on which the Commission received most submissions was automatic promotion, with widespread pleas from all quarters that it should be abandoned. A significant minority suggested that automatic promotion be retained, but in modified form.

4.61 Because automatic promotion is so much criticised today, we think it important that people should understand why it was originallly introduced. Prior to 1968 promotion from grade to grade depended on a child passing a school-set examination at the end of each grade up to the Standard 6, with the Primary School Leaving Examination being set by the Ministry of Education at the end of Standard 7. Those who failed to satisfy the pass requirements at the various grades were obliged to repeat or to leave. They could not be promoted. The data we have from 1966-1967, before automatic promotion was introduced, show that only 64 percent of 1966 pupils were promoted to the next primary grade in 1967; 22 percent repeated the same grade and the remaining 14 percent left school from grades 1 - 6. According to the 1966 Report of the Ministry of Education, only 13 pupils out of every 100 who entered Standard 1 actually completed the primary course.

4.62 Since automatic promotion was introduced, Botswana has achieved one of the highest continuation and completion rates in primary school in all Africa. The positive side of automatic promotion therefore has been that instead of being rejected by the system, almost all children are able to complete the primary cycle; the excessive size of classes caused by repetition has been reduced; and the age range in any one class has been greatly diminished.

4.63 But these achievements are misleading since they conceal the fact that the actual learning achievement of many of those reaching Standard 7 under the automatic promotion system is extremely low. The very low achievement levels found in the Commission's special study suggest that some children are being promoted from class to class without mastering the basic foundation on which further learning can be built. Many children are virtually illiterate at Standard 7 when they have nearly completed the primary course. The number who cannot read the most simple sentences is as high as thirty to forty percent. Because there is no check on performance at each grade, both children and teachers in the lower grades have no means of measuring learning attainment and how far this is above or below what is normal. No rewards and no penalties attach to good or bad teaching and learning. It is only when the first real assessment comes at the Primary School Leaving Examination in Standard 7 that poor performance becomes apparent, and then it is too late for effective correction.

4.64 The Commission cannot recommend a return to the evils of the old system, but it is strongly of the opinion that automatic promotion cannot be left in its present form. The general principle of promoting the great majority should be retained, but changes are needed.

The Commission recommends that:

Instruction should become more individualised through the use of tests that can be administered by the teacher, by use of teaching materials graded as to difficulty, and by special help for children who are lagging behind (given by either the teacher or by the more able students who have mastered a given unit).

A national test in Setswana should be administered after Standard 4 (the end of the Setswana medium cycle) and children who are lagging seriously behind should repeat the Standard before proceeding to the higher standards.

In exceptional cases children who are found to be lagging other than at Standard 4 should be allowed to repeat, with the permission of the Head Teacher and written approval of the Education Officer.

Remedial teaching should be provided by the class teacher, or by a special teacher trained in such methods and provided in some schools, or by more advanced students, who can strengthen their own skills by tutoring classmates.

Simple standardised records of progress should be kept for each child to make possible an assessment of attainment against age and grade norms. Such records are especially important in the light of high teacher turnover.

Short written reports on progress should be submitted to parents at the end of each school year.

Methods of individualized instruction and of checking on children's progress should be taught in the teacher training colleges and should be the subject of in-service workshops for serving teachers.

The Ministry should undertake a major development project to design diagnostic tests, develop a proper system for recording pupils' progress, and train teachers and inspectors in the use of these tests and methods. (R-27)

4.65 We should make it clear that we do not argue that the above measures by themselves will be enough to improve standards in primary education. We see them as only part, but an indispensable part, of a total package including improved teacher training, curriculum reform and syllabus revision, strengthened inspection, more adequate buildings, furniture and school supplies, and an improved management system.

Examinations

4.66 In formulating its recommendations in this area, the Commission has drawn on the findings of Mr. Anthony Somerset who acted as consultant to the Commission and whose paper is presented as Annex 2 to this Report.

4.67 The main purpose of the Primary School Leaving Examination should be to provide an objective country-wide assessment of pupil attainment at the end of the primary course. Such an examination supplements the assessment of pupils' progress that we recommend should take place throughout the course. As such the examination can be an important source of information to the education authorities about pupils' learning difficulties and about where remedial action needs to be taken. In this way the examination can be not only a measure of learning in the schools, but a way of improving quality. We recommend that Botswana should develop a capacity to analyse the examination results both as a contribution to curriculum reform and improved teaching, and as a means of improving the examinations themselves. Technical assistance will be needed and the examinations function should be closely associated with curriculum and syllabus reform in a new administrative unit in the Ministry of Education.

4.68 The Primary School Leaving Examination can only serve as a measure of performance of the education system if a uniform standard of marking is kept from year to year and if the grades awarded represent properly graduated differences in achievement. Neither of these conditions obtain at present. The grades appear to represent a different standard of achievement from one year to the next, and grade "C" appears to cover a far wider range of abilities than any other.

4.69 If the examination is to be a measure of success in the primary courses, the content of the examination should reflect the course content, which should in turn be geared to the objectives of primary education. For this reason the Commission advocates inclusion of social studies and science in the examination as a replacement of the General Knowledge paper, which appears to encourage rote learning of facts irrelevant to the pupils immediate environment. The new tests, in contrast to the General Knowledge paper, should assess not merely memorization but also powers of observation, explanation and reasoning. (See also Annex 2 for detailed discussion of this point). The essay papers should certainly be retained as they test important kinds of skill, but the arrangements for marking may need reconsideration as the Primary Task Force suggests.

4.70 Pupils should be given more information on their performance on each paper of the examination in order that they may know where their performance should be improved. Similarly, previous year's papers should be available in the schools in order that teachers and pupils should know the kind of questions likely to be asked. The Commission understands the reasons why the authorities have decided to withhold marks and papers in the past, but considers that this inhibits the possibility of improved performance by pupils and schools.

4.71 It must be accepted that from the point of view of pupils a major purpose of the Primary School Leaving Examination at present is to select for secondary school. Until the long term strategy of universal junior secondary comes into effect, it seems reasonable to use the examination for this purpose rather than to set a separate selection test, and the Commission considers it preferable to have a single national system of selection rather than separate examinations set by each secondary school.

4.72 If the Primary School Leaving Examination is to be used for secondary selection, the same subjects that are tested to assess performance of the primary course must be given full weight in secondary selection. Students are unlikely to take seriously any subject examination which appears as part of the Leaving Examination but cannot earn them credit for secondary school selection. This is now the ambiguous position of Setswana on the Primary School Leaving Examination.

4.73 It is possible that the Primary School Leaving Examination measures not so much the ability of the pupils as the quality of the primary school they attended. Papers presented to the Commission by the Institute for Development Management (Annex 6) and a supplementary study of access to secondary schools (Annex 7) indicate that the selection process discriminates against pupils from rural schools with few qualified teachers. We have also heard evidence that pupils with marginal marks on the examination from remote areas have been known to perform better in secondary school than some pupils with better marks from good schools in more developed areas of the country.

4.74 This suggests that able children are being excluded and that the country is wasting a portion of its most promising young people. One approach that should be explored is a quota system such that the children with greatest ability in each primary school (say the top 5 - 10 percent of every Standard 7 school in the country) should be admitted for Form I, even if their mark order did not win a place for them. For schools that place

10 percent or more of their pupils in Form I, the quota would be irrelevant. For those schools that place less than 10 percent of Standard 7 leavers in Form I now (and there are a substantial number), the quota would mean that the brightest children had a chance to succeed in secondary schools. Selection and admissions to secondary schools are discussed in Chapter 5.

The Commission recommends that:

Botswana should develop a capacity to analyse examination results both as a contribution to curriculum reform and improving teaching and as a means of improving the examinations themselves. (R-28)

Letter grades used in marking the examinations should signify a constant standard of performance from year to year, and should represent properly graduated differences in levels of achievement. (R-29)

Papers in social studies and science should replace the present General Knowledge Paper on the Primary School Leaving Examination. (R-30)

Pupils should be given more information about their performance on the examination and sample papers from previous years should be released. (R-31)

All subjects that are tested to assess the performance in the primary course be given full weight in the process of selection for secondary schools. (R-32)

For the purpose of admission, the Ministry of Education should explore the possibility of a quota system such that between 5 and 10 percent of the children with the greatest ability in every Standard 7 school should be admitted into Form I.

The School Calendar

4.75 For the time being the length of the primary course should remain at seven years but as explained elsewhere we hope that quality can be improved to the point where progression to the junior stage will take place after Standard 6. Realism prompts us to state that this will require perhaps a decade to effect.

4.76 A number of representations were made to us about the possibility of rearranging the school year to take account of the agricultural and climatic cycle in Botswana. We considered carefully the feasibility of having two long terms running from January to June and July to November, as used to be the case, with a short mid-term break in each. Problems arise with boarding schools, mainly at the secondary level, insofar as the short mid-term breaks do not allow sufficient time for pupils to travel home and back again. Because parents may have children at both primary and secondary schools, or because teachers at one level might have children attending the other, we think it necessary for primary and secondary schools to follow roughly the same calendars. We also note that the timing of the rains is unreliable so that stopping school in early or mid-November so that children can help with the ploughing would not always yield the intended benefit. We therefore conclude that the timing of the school year should not be changed.

4.77 We consider the present regulations regarding the school day to be adequate. As we have indicated previously, afternoon sessions should be organised where this enables children to be in the classroom instead of the open air. Half sessions, sometimes necessary when teachers are scarce, should only be conducted by trained teachers. We have been told of very successful experiments with the use of half-sessions to teach half-classes in preference to full sessions for 45 pupils. Whilst this may pay dividends in exceptional cases with a highly skilled teacher, it is not a practice we would generally advocate and permission should always be sought from the Education Officer in the District before introducing it.

The Commission recommends that:

the primary school course should be shortened, by 1990, to six years as part of the restructuring of the school system. (R-33)

the timing of the school year should continue as at present. (R-34).

CHAPTER 5

Second Level Education

INTRODUCTION: THE SECOND STAGE OF EDUCATION

5.01 We look to the first stage of education to provide a common foundation of basic learning for everyone. The second stage has the more complex task of helping special interests and talents to emerge and develop so that young people may prepare themselves for the different occupations and roles that exist in adult society. This stage should therefore carry learners forward from the state of relatively immature dependence on adults to one of mature responsibility.

5.02 The second stage of education comprises the five or six years after the end of primary school up to the age of 18 or 19. All the forms of education and training that take place over those years are part of this second stage -- not just secondary schools, but also Brigades training, apprenticeship, vocational schooling, training in nursing or teaching, and various part-time studies. Although we shall mainly be discussing the academic secondary school system in this chapter secondary schools are only one of many types of post primary, or second stage education. Vocational education is the subject of a special study (see Annex 3) and is discussed in paragraphs 5.99 - 5.105 of this chapter. Out-of-school opportunities at the second level are discussed both in Chapter 7 and in Annex 3.

5.03 The Commission hopes that Botswana -- not only Government but also parents, community organisations, and employers -- will recognise that the years of adolescence are educative years for all and that there is a responsibility to help the whole age group discover their talents. In addition to more structured education and training, students should have useful formative experiences during this stage. Botswana will not be able to afford universal five-year full-time secondary education for the whole age group for many decades. It is doubtful that this would be appropriate, in any event. But what the country can and should do now is to pursue a conscious policy of making educative experiences available to the whole age group. This might take the form of vocational training, supervised study opportunities through evening classes, correspondence and radio teaching, and national service schemes, as well as attendance at schools.

5.04 It is all too easy to nod one's agreement with these ideas, but we should point out that they have truly far-reaching implications for a reorientation of education and indeed of development strategy, in Botswana. The present educational structure is based on the supposition that the only really worthwhile education is formal academic schooling and the only really worthwhile young people are those who succeed in getting into Government secondary schools. Other full-time training courses are seen as second best consolation prizes. The 75 percent of the population that does not find its way into either academic or vocational channels tends to be regarded at best as unimportant; at worst as a source of social problems. Botswana devotes virtually all its secondary education resources to the lucky few and, having done so, pays them much higher salaries than those who did not receive the benefit. The manpower plans appear to assume that economic growth depends chiefly on high-level manpower and specialised technical skills; and that the knowledge and skills of the majority of farmers, traders, craftsmen and manual workers, are less important. A questionable justification, in terms of manpower needs for economic growth, is given for concentrating educational resources on a relatively small minority, rather than raising the level of education, skills and culture of the whole population.

5.05 We are not suggesting that the needs of the modern sector of Botswana's economy be ignored. National economic growth has largely been based on high technology production in mining and other sectors that require skilled and educated personnel. Nor do we suggest that full-time educational opportunity no longer has to be rationed. In fact it must be, because shortages of financial and teacher resources will preclude universal formal secondary schooling for many years. Rather, we are pleading for a new look at development strategy that will utilize the talents and energies of Botswana's youth, for a wider view of the country's educational needs, and for a more equitable balance in the future distribution of resources and rewards. Those who have the privilege of receiving secondary, technical and higher education should consume less of and contribute more to the nation's resources, particularly if they are being supported by the community in full-time study. A greater share of the resources available for second stage education should be directed towards helping the majority to acquire knowledge and skills out of school through work, part-time study, community programmes and other activities.

THE LONG TERM STRATEGY FOR SECONDARY LEVEL DEVELOPMENT

5.06 In recent years approximately 20 percent of Standard 7 pupils have gained places in Form I in Government and Aided schools the following year. The opportunity to attend secondary school, in terms of the proportion of Standard 7 pupils who actually enter Form I in the following year, has increased slightly as shown in Table 5.1.

Table 5.1

Index of Opportunity to Enter Secondary School in Botswana, 1970-76

Enrolment				Index of Opportunity to enter Form I of secondary School (%)	
Standard 7	Form I				
	Public (Gov. & Aided)	Private	Total	Public (Gov. & Aided)	Public & Private
(1970) 6 913	(1971) 1 591	n.a.	n.a.	23.0	n.a
(1971) 8 116	(1972) 1 828	n.a.	n.a.	22.5	n.a.
(1972) 9 749	(1973) 1 826	1 083	2 909	18.7	29.8
(1973) 12 002	(1974) 2 362	1 487	3 849	19.7	32.1
(1974) 13 811	(1975) 2 812	1 483	4 295	20.7	31.1
(1975) 14 449	(1976) 2 861	2 126	4 987	19.8	34.5

Note: The proportion of students in Standard 7 who eventually proceed to Form I would in fact be rather higher than indicated above, because of the high repeating rates in Standard 7. If repeaters were excluded from the 1975 Standard 7 enrolments the index of opportunity would be 25.1% for the public secondary system and 44.0% for the public and private systems together.

5.07 As the figures in Table 5.1 make clear, in addition to students admitted to Government and Aided secondary schools, a large number enter unaided secondary schools outside the public system. In 1976, Form I enrolment in Government schools was 2 861 while an additional 2 126 entered unaided schools. Thus the overall proportion of Standard 7 leavers who enter Form I is substantially higher than the figures for Government schools alone would indicate. The considerable and growing enrolment in unaided schools indicates the strength of demand for secondary places.

5.08 Government plans to add 875 new Secondary Form I places (25 classes of 35 pupils each) by 1980. However, the number of Standard 7 completers will grow much more due to the "wave" of increased primary enrolment that will reach Standard 7 in 1979. Thus under existing Government policies the proportion of Standard 7 pupils who enter Form I of the public system would actually decline, falling to 17 percent in 1979/80 and to only 14 percent in 1981/2. The situation will be marginally improved if the Government accepts the Commission's suggestion that it abandon its proposal to reduce the approved class size at junior secondary level from 40 to 35:

an extra 500 places would then be available. In any event, a decreasing index of opportunity to enter public secondary schools, high social demand for second stage education, and the present very high costs of secondary education, together pose serious policy issues. The Commission has considered these factors in recommending a new strategy for secondary education.

5.09 Universal junior secondary education is desirable and necessary at some future stage in Botswana's educational development. As to its desirability, the falling age of primary entry makes it more difficult to bridge the gap between leaving Standard 7 and attainment of physical and emotional maturity at age 15 or 16, giving rise to a "school leaver problem" of major proportions. Seven years of primary does not by itself provide an adequate educational foundation for either specialised training or life in the modern world. A further two or three years of general education for all is a highly desirable long term aim. The most important factor in a pragmatic sense is that parents demand with increasing urgency that places be provided for their children. This demand cannot be denied for many more years if the overall prosperity of the country should continue to rise. The question is not whether to expand but how to do so in a rational fashion that will not involve impossibly high costs.

5.10 *For financial reasons it would not be possible to expand the present very expensive type of secondary schooling to much greater numbers even on a day attendance basis.* The public recurrent cost of a junior secondary pupil year (a weighted average of boarding and day student costs), as estimated in the Fourth National Development Plan, is P430 per year. By way of illustration only, universal lower secondary education at this cost level (64 000 places by 1981) would cost P27.5 million. This is some 50 percent more than the total projected recurrent budget for education in 1981. The development costs of the six new secondary schools to be built with IBRD funds is approximately P1 000 per place, excluding boarding facilities. These figures contrast sharply with primary recurrent costs of approximately P45 per pupil year and development costs for primary schools built by contractors of P100 per place.

5.11 *In any case we doubt whether expansion of the system in its present form is desirable, resulting as it does in the first years of secondary education being so vastly different from the primary years and exposing the child in many cases to a kind of culture shock.* Children may move in one jump from a small school in their villages attended by those they have grown up with. Often enough they arrive in a school where they know nobody and which has several hundred pupils. They are perhaps away from home for the first time, the food is strange. Many of the teachers are expatriates and understand no

Setswana. The teaching is unfamiliar, being on a subject specialisation basis instead of a class teacher for all subjects. If some of these gaps between the primary and secondary school could be bridged more gradually by an intermediate stage or school, children and their learning would benefit.

5.12 *The Commission rejects the concept of a dualistic structure of secondary education with a small but expensive stream selected by examination and a large "practical" stream for the system's rejects.* In other words, secondary education should not be expanded by adding an inferior type of education for the majority to the present academic form of secondary education for a minority. This would be contrary to the national principles of democracy and unity. It would be mistaken in educational terms, since it discriminates against those 12 or 13 year-olds who may be late developers, and it makes the last years of primary education years of great stress, dominated by the selection examinations. And above all, it would not achieve its desired end. Pressure to expand the elite stream would continue, since parents and children would recognise the differences between the two different streams and there would be continuing demand to expand the superior type of education.

5.13 For these reasons the Commission proposes a long term restructuring of the system from its present 7 - 3 - 2 pattern to a 6 - 3 - 3 pattern.

> *The Commission recommends that, over the long term, Botswana should move towards nine years of virtually universal education. The primary cycle should be shortened to six years and should be followed by three years in junior secondary school for all students. Such a system should be feasible by 1990. (R-35)*

5.14 The sort of junior secondary school envisaged would be a rather modest day secondary school, linked closely with the primary schools from which their children are drawn. Day schools are very much cheaper than boarding schools, but some limited provision for boarding would still be necessary for students from outlying areas. Since buildings would be less elaborate than at existing schools, construction costs would be lower. Self-help construction of school buildings should become a major source of classroom space for the schools. Lower staffing ratios, of the order of 1.4 teachers per class rather than 1.6 in present junior secondary schools, should prevail. Class size should be of the order of 40, where population density permits. Teachers should be prepared in a two-year course at the post-Form V level, as discussed in greater detail in chapter 6. It should be possible to provide such education at a recurrent cost of approximately P180 per pupil year at 1976 prices, less than half the average annual cost of junior secondary education (Forms I - III) as presently offered.

5.15 The present secondary schools with their superior physical facilities, including hostels, would serve as senior secondary schools for a three-year cycle leading to Senior Certificate level. Admission to senior secondary would be on the basis of a competitive examination and would necessarily be limited. By the time this policy is fully implemented, the need for places at the three year senior secondary level would absorb all of the capacity of the present and planned secondary schools. (i.e. the 12 000 secondary places would provide approximately 4000 per form in the new senior secondary schools). With this in mind, the junior secondary streams would gradually be removed from existing secondary schools. We would thus hope that wide differences in physical standards among the junior secondary schools, with the inevitable implications of an elite group of schools at the junior secondary level, could be avoided.

5.16 While "universal" junior secondary education is envisaged, promotion from the final year of the six year primary school would be preceded by a test to determine whether candidates had achieved sufficient basic competencies to proceed immediately to the next level. If they had not achieved a sound foundation, students would be required to repeat the final primary year.

5.17 Although the costs of providing virtually universal access to junior secondary education will be great, they must be compared with the costs of alternative strategies. In table 5.2 a few rough calculations indicate the general magnitude of recurrent expenditure in 1990 implied if Government:

(a) continues with the present system and structure, and a 20 percent rate of access to lower secondary; or

(b) continues the present system but provides 50 percent access, or

(c) adopts the strategy proposed here: universal access to a low-cost, three-year junior secondary cycle.

5.18 Table 5.2 shows that the cost of continuing the present strategy of very limited access to secondary Form I would be lowest. This is not surprising, for this alternative also yields the smallest benefits. The cost of the second alternative -- expanding the present system to allow 50 percent continuation to Form I in 1990 -- would be P17 million, yielding a total cost of P42 million for the three levels (primary, junior secondary and senior secondary). This is actually higher (by over P2 million) than the cost of the third alternative of universal access to a lower cost form of junior secondary, which is the strategy proposed by the Commission.

Table 5.2 Comparison of Recurrent Costs of Alternative Strategies of Junior Secondary Level Development in 1990

	Alternative A				Alternative B				Alternative C			
	present structure, limited access				present structure, increased access				modified structure, universal Jr secondar			
Education level	No of years in level	approximate enrolment per year	estimated unit cost (1977 Pula)	total cost (000)	No of years in level	approximate enrolment per year	estimated unit cost (1977 Pula)	total cost (000)	No of years in level	approximate enrolment per year	estimated unit cost (1977 Pula)	total cost (000)
Primary	7	30 360	100	21 252	7	same		21 252	6	same		18 216
Junior Secondary	3	5 040	450	6 804	3	12 600	450	17 010	3	25 660	200	15 396
Senior Secondary	2	1 840	500	1 840	2	4 000	500	4 000	3	4 000	500	6 000
Total cost				29 896				42 262				39 612

Assumptions:

a. Primary enrolment = 100 percent of age cohorts 7 to 13. Population estimates by single-year age cohorts from Ministry of Finance and Development Planning.

b. 'Limited access' for secondary assumes 20 percent of age cohorts enrolled; increased access assumes 50 percent enrolled.

c. Upper secondary enrolment in alternative A based on 40 percent pass rate from Form III to Form IV. In alternatives B and C an upper limit of 4 000 admitted per year is assumed in both cases.

d. No attempt has been made to estimate the effects of inflation to 1990. The unit costs of primary education assumed have been approximately doubled to account for increased costs of higher quality primary education (eg a higher proportion of trained teachers). Unit costs of junior and senior secondary in alternatives A and B are roughly equivalent to present unit costs. The cost per student year of the intermediate type of day junior secondary school in alternative C is estimated at P200 per year.

e. This indication of the costs of implications of the strategy proposed excludes the costs of administration and supervision and of vocational, teacher training and other types and levels of education, which may be assumed to be the same for all alternatives. Costs of potential aid to private secondary schools which would tend to increase the costs of alternatives A and B, are also excluded.

Source: National Commission on Education

5.19 Any analysis of this kind depends very heavily upon the continuation rates and costings assumed. By lowering the assumed continuation rates under the first and second alternatives they can be made cheaper, but the problems of the fourteen to seventeen year old school leavers, and of controlling private secondary schools, would have to be faced. In the same way the financial attractiveness of our third solution depends on the junior secondary school being low cost.

5.20 After studying the alternatives, the Commission is firmly of the opinion that the advantages of its proposed strategy appear to outweigh the disadvantages by a wide margin, so long as the following important conditions are met:

(a) *Government must ensure that costs of the junior secondary level are in fact kept low.* Failure to follow the guidelines in paragraph 5.14 would undermine the aim of the strategy.

(b) *Government must plan and regulate the development of junior secondary schools.*

Since a large part of the system would come into existence through absorption of self-help schools, proposals to establish new schools of this kind should be approved by District Development Committees in accordance with plans for district-wide development at the junior secondary level. Capacity to exercise this control at the local level must be developed to avoid inefficient proliferation of schools.

(c) *Junior secondary schools should have a distinct identity.*

They should represent an identifiable intermediate stage in the educational ladder, with clear goals regarding what children should learn at this level. They should be neither primary continuation classes nor watered down versions of present senior secondary schools. For this reason we stress the necessity for the present secondary schools to give up their junior secondary classes in the long run. If junior secondary classes remain in some senior schools, this would imply much superior facilities for junior secondary students in a handful of schools. It would also be difficult to establish a new, more-relevant curriculum.

Transition To The Proposed Structure

5.21 As noted, implementation of the long term structure and strategy that the Commission proposes will require careful planning and effort. Government must decide whether it accepts the concept of an intermediate level of education, in day secondary schools, at lower costs. If so, the necessary resources in terms of finance, local manpower and technical assistance must be fully committed to implementation of the concept. A number of aspects of implementation will have to be carefully considered:

(a) Supply and location of classroom facilities. Should these be (i) attached to existing primary schools, (ii) in separate schools or (iii) a combination of both, depending on local circumstances?

(b) Timing of the expansion of junior secondary enrolment and the change-over to the new structure. (Appendix D presents alternative approaches to this question);

(c) Change in the nature of the Junior Certificate Examination and the level at which students sit this examination (after the ninth year of education rather than after the tenth year, as at present).

(d) Development of a new syllabus and curriculum for the junior secondary course, incorporating the Commission's recommendations regarding the objectives and practical orientation of this level of education;

(e) Training of new category of teachers for the junior secondary level.

(f) Necessary changes that must be made in the primary syllabus and curriculum and in the Primary School Leaving Examination, providing a six year primary cycle that will link closely with the new junior secondary course;

(g) Provision for gradually increasing government assistance to presently-unaided secondary schools;

(h) Public information programmes to inform parents, employers and others about the nature of the structural change and the reasons for carrying it out.

5.22 The Commission's recommendations on curriculum and syllabus changes, examinations, and assistance to unaided secondary schools are presented in other sections of our Report. Appendix D discusses the phasing of the transition in greater detail.

5.23 The Secondary Curriculum Task Force considered the question of the structure of secondary education at the Commission's request, but in a different context (assuming that the seven-year primary cycle would remain unchanged). The Commission has reviewed the Task Force's findings carefully, notably the view that a two-year junior secondary cycle would be too short to mount an effective course of study. Our own recommendations of a 6-3-3 structure, nine years of universal education, and a different kind of junior secondary education have taken the Task Force's recommendations into account, as well as many factors that the Task Force was not asked to consider.

5.24 Two of the points raised by the Task Force are highly important. First the Task Force observed that the educational achievement of a leaver after nine years of schooling (new Junior Certificate) would inevitably be lower than that of a leaver after ten years (present Junior Certificate). This must be accepted even though with an improved quality in primary education and changes in the junior secondary course, a higher standard could be achieved by the end of the ninth year of schooling than at present. Employers and training organisations would therefore have to review their training programmes to take account of the new structure and make any necessary adjustments in their training courses. Second, the Task Force questions whether universal lower secondary education would simply "move the school leaver problem" to an older age group. The Commission's view is that the nature of the problem would be different, since the school-leavers at 16 or 17 would be physically, intellectually and socially more mature than the 13 and 14 year olds presently emerging from primary schools.

5.25 Before leaving the question of educational structure at secondary level, we should refer to one other issue, namely whether Botswana needs General Certificate of Education Advanced Level Courses or a sixth form. Some of the submissions we have received have argued in favour of a two-year sixth form course for Botswana. This is in contrast to the decision taken some time ago not to establish such a course, but instead to have entry to the University at School Certificate level and a four year, two-part degree programme with a screening examination after the two-year Part I. Successful students can then continue to Part II at UBS or enter specialised courses in universities elsewhere.

5.26 In judging the relative merits of having the first two years after the School Certificate in a "sixth form" or a two-year Part I at the University, there are several factors to consider. On the one hand the present structure takes students through to first degree level in four years. This is a saving of one year over the pattern (found in Britain and some other African countries) of two years sixth form and a three year university degree course. Although the Botswana structure raises some problems, it also has obvious advantages.

5.27 Another question is cost, and here, because of the extremely high unit costs at the University of Botswana and Swaziland there seems little doubt that two additional years in a sixth form would cost less than the present fourth year of university studies. In other words, the transition to a five year structure with two years outside the University would actually be cheaper, other things being equal, than four years in the University. This is because the whole capital and recurrent cost structure including levels of bursary awards, student staff ratios, employment of ancillary staff etc., are far higher at the University than would be tolerated in a sixth form establishment. However, the final factor is whether "other" things are in fact equal. The most obvious point about the University as it is presently structured is that the Part I students account for 200 out of only 550 students on the Botswana Campus in 1976/1977. Removal of Part I students might so raise costs per remaining student at the University, since overheads would still need to be covered, that the University might lose financial viability altogether. Since the University was not directly included in the Commission's terms of reference we have not felt justified in exploring this matter any further beyond the above observations, and we have had to assume that the present arrangements will continue for the time being.

5.28 If the present structure is retained, however, one anomaly should be removed. At present Maru A Pula, the private secondary school in Gaborone, offers a sixth form "A-Level" course and recently Government has decided to provide bursaries for Batswana to attend this course. The rationale for this step is that some students wishing to pursue university courses not offered at the University of Botswana and Swaziland -- engineering, medicine, veterinary medicine, etc., -- will need "A" level education in order to enter overseas universities. The Commission disagrees with this decision for several reasons. First, the present numbers of students eligible for entry to Botswana's University College are very small and the University is operating at low enrolment levels and high unit costs, and diversion of eligible Batswana from the University makes this situation worse. Secondly, every effort should be made to negotiate arrangements with specific foreign universities for Botswana's University Part I leavers to enter specialised science based study programmes which are not available in Botswana. It is of course recognised that what the University can do in this respect depends a great deal on the combination of subjects which the students take at School Certificate level. Finally, as in the case of the English Medium primary schools, the Commission feels strongly that public support of an elite form of education for a favoured few is inequitable and contrary to the national principle of unity. While the concept of multiracial education at Maru A Pula is valuable and Batswana who wish and can afford to send their children to the sixth form at this private school should be allowed to do so, provision of public bursaries should, in our opinion, be ended.

The Commission recommends that no new bursaries be awarded for Batswana to attend the sixth form course at Maru A Pula after the 1977 school year. (R-36)

FUTURE OF THE UNAIDED SECONDARY SCHOOLS

5.29 The existing unaided secondary schools and continuation classes reflect several aspects of the strategy of educational development we have outlined. First, many of these schools are operating examples of community self-help, demonstrating that communities can act to meet their own educational needs. Secondly, most unaided schools provide education adapted to the communities' needs, on a day basis, at relatively low unit costs. Thirdly, a number of unaided schools and continuation classes provide evening classes for students who work. There has been no clear policy regarding unaided secondary schoools, in large part because their growth cannot be predicted or controlled under present circumstances. The Government has tended to consider these unaided schools as part of the problem of planning the expansion of the system; we consider them part of the solution, as will be explained below. The Commission foresees that the unaided secondary schools will undergo a gradual transition from being completely unaided now, to being partially assisted during the 1980s, and finally completely absorbed as part of the new junior secondary system. However, we would hope that even with a Government takeover of the unaided schools, particular features such as the evening classes would be retained.

5.30 In the short run, the Government's policy regarding the existing unaided secondary schools must focus upon the quality of education in them. We have met some expressions of contempt for the standards and achievements of the unaided secondary schools. On this point, too, our own perspective is rather different. A few of them appear to be little more than profit-making institutions and may indeed be exploiting the parents and children who patronise them. But the majority of those that the Commission has visited seemed to be making a genuine effort to cater as best they can for the educational needs of their pupils in what amount to extremely difficult circumstances. They have been receiving virtually no help of any kind from Government; they are expected to cover costs from fees and such donations as they are fortunate to attract; and their pupil intake is of much lower ability (as measured by Primary School Leaving Examination scores) than in Government schools. The Commission's achievements study indicates that standards in these schools are much below standards in Government schools. One should not claim too much for these schools in academic terms, since their Junior Certificate results are often poor and many of them weed out pupils in Forms I and II so that those taking the examination are only a small proportion of the intake some years previously. Even so, a comparison of the 1975 performance on Junior Certificate indicates that some of the private secondary schools (not counting Maru a Pula) produce results that compare favourably with some Government schools. The real contribution of the unaided schools is that they are providing for the needs of the primary school leavers who are not served by any other institution or programme.

5.31 It is easy to scoff at the efforts of the unaided schools, but the attitude should be one of help rather than derision. Seen from the point of view of the pupils who attend the schools, Government policy is to provide a good education almost free to students with high examination scores, whereas those who perhaps need more educational help and support must pay much more to receive a mediocre schooling. One may argue that pupils in Government schools 'deserve' more help because of their better performance on the Primary School Leaving Examination; but it is arguable that some of the pupils performing less well on the Primary School Leaving Examination are in fact being penalised for the faults of a poor primary school, an unsatisfactory selection examination or an inefficient bursary system; or simply because they are 'over-age'.

5.32 There are many ways of helping unaided schools, in the short run, without either financial subsidy or complete takeover, which Government might consider as short term measures. We suggest that the following possibilities be investigated:

(a) advisory and inspection visits;

(b) circulation of all items of information such as regulations, syllabi, newsletters, etc., that government schools receive;

(c) help through the Botswana Extension College with correspondence course material in appropriate subject areas;

(d) arrangements to use facilities belonging to neighbouring Government schools;

(e) support for applications to foreign sources of funds and volunteer teachers for assistance;

(f) protection of the pension and other rights of members of the Unified Teaching Service who join the staffs of such schools;

(g) special help in arranging the transfer of successful candidates to Form IV places in Government schools;

(h) provision of standard plans for buildings and general help in connection with development projects;

(i) a contribution of cement, roofing material and windows to communities who are prepared to construct buildings to approved design using self-help labour.

5.33 Upon completion of the present expansion programme, after about 1980, as Government funds become available for secondary development, the support for the unaided schools should move into a new phase of direct financial help. We suggest this should take the form of gradually increasing subventions to the school budgets, rather than an immediate subsidy to the fees, because the main need is to improve the quality of what pupils are receiving in return for their fee payment. In terms of present costs we envisage that the schools could provide a reasonably good education for P150 per student year, compared with public costs of P430 and private costs (school fees) of around P100 in Government schools. If the subsidy started at a level of around P50 at today's prices, it could be gradually raised to cover the whole cost within five or ten years. Other means of subsidizing and improving the quality of the self-help schools, which might be considered late in the decade of the 1980s when the supply of secondary teachers for the Government schools become more adequate, include provision of trained teachers and headmasters on secondment or other basis. Finally, Government could assist students in self-help secondary schools by providing bursaries.

5.34 In order to provide the immediate professional and other support outlined above, to monitor the quality of the unaided secondary schools, and to plan and administer a programme of financial assistance for the future, there should be an officer in the Ministry of Education, responsible for development of the unaided schools (see paragraph 8.46).

5.35 *The Commission recommends that:*

Government should immediately review its policy towards the unaided schools and in the short term should be prepared to offer professional help to any school that is neither individually owned nor profit-making, and which puts itself under the management of a properly constituted board of governors. (R-37)

As resources permit, Government should develop in the medium term a programme of gradually increasing assistance, in the form of money and teachers to the presently unaided secondary schools. In the longer term these schools should be completely absorbed, mainly at the junior secondary level, into the public system. (R-38)

IMPROVING THE QUALITY OF PUBLIC SECONDARY EDUCATION IN BOTSWANA

The Causes of Low Quality

5.36 The academic performance of public secondary students is far from satisfactory. In the Commission's survey of achievement (Annex 1) Form III students with an average age of 17 had an average score of only 31 percent on an international test of reading comprehension designed for fourteen year olds. Form V students averaged 50 percent on the same test. Even taking into account the handicap that English (though used as the medium of instruction) is a second language for Batswana, the performance of Form III and Form V students is hardly reassuring. The results of the Junior Certificate examination have been improving in recent years, but the procedure used for standardizing the Junior Certificate scores raises doubts about the meaning of this improvement (see Annex 2). Many educators complain that that the high scores on the Junior Certificate are misleading. The Cambridge School Certificate pass rate has, in contrast, shown a long-term downward trend that was only reversed in 1975. In that year 54 percent of the 686 candidates who sat the Cambridge examination obtained a full certificate, and less than one candidate in five obtained a division 1 or 2 pass that qualifies for admission to the University. The results for 1976 were somewhat worse.

5.37 The quality of a secondary school is not of course to be measured only by examination results, but also by the quality of life of the school, and by the outlook and orientation of the pupils. With some fine exceptions we do not find general satisfaction either from outside or inside the schools with these aspects of quality. The Commission has heard many complaints that students are listless and poorly motivated towards work, that they have little commitment to the nation or to the local community, that they show little initiative or ability to solve practical problems.

5.38 The Commission has given considerable thought to how these problems might be remedied, and has reviewed oral and written evidence regarding qualitative improvement. It is clear that the faults of secondary education do not stem from a lack of commitment of resources by Government in terms of numbers of teachers, budgetary resources or quality of buildings and equipment. Obviously there is no single cause or any one remedy for the unsatisfactory state of secondary schooling, but there seems to be fairly general agreement that major factors include:

(a) Poor quality of student intake due to an inadequate foundation at the primary level and possible problems in the selection and bursary mechanisms;

(b) Inexperienced teachers and excessive teacher turnover, particularly in the case of expatriate teachers;

(c) Poor student motivation resulting in part from automatic promotion, from excessively generous marking of the Junior Certificate examination, and from excess demand for secondary and higher graduates;

(d) Excessive emphasis in the curriculum upon abstract learning and memorization and neglect of practical studies and of acquisition and application of skills;

(e) Unsatisfactory syllabi in some subjects;

(f) Inadequate attention to social and communal life in most schools;

(g) Limited professional leadership and help from the Ministry of Education;

(h) Ineffective school organisation and management within the schools.

If secondary education is to be improved, action in all these areas is needed. The problems associated with teachers are discussed in chapter 6, and questions or organisation and management are covered in chapter 8. This chapter contains recommendations on the other factors.

Access to Secondary School

5.39 If our proposals for the long-term restructuring of the system are accepted, then access to the junior secondary level will become universal and, subject to the need for some pupils to repeat standard 6, virtually automatic. In the interim transitional period however, selection to Form I will remain necessary and we have therefore to consider how access can be improved and made fairer.

5.40 Botswana has been wise to develop a network of public secondary schools of relatively even quality, although it is to be expected that different schools at different times will gain a reputation for excellence in various respects. We note with favour the Ministry's requirement that qualified candidates who live within reach of a day school should attend it. This prevents any secondary school from "creaming off" the best students from all over the country.

5.41 The Commission has indicated in chapter 4 (paragraph 4.74) that the practice of allocating places on order of merit (subject to the candidates' eligibility for a day versus a boarding place) should be modified by means of a quota system, to eliminate bias in the selection process against students from certain regions or primary schools. We suggest that the top five to ten percent of every Standard 7 class (or group of classes if this is found to work better) should be allowed to enter secondary school. The total number of students admitted on concessionary terms under a quota system would probably be of the order of 100 to 150 (i.e. 3 to 5 percent of the Form I intake). This would of course mean that some children from poor rural schools will be admitted to Form I even though they have lower grades than other children who are excluded, and it cannot be guaranteed that all children from disadvantaged education backgrounds will "catch up". Although we recognise that it must be uncertain whether educational efficiency would necessarily be promoted by such a scheme, we think its introduction is justified on two other grounds. First it will provide a stimulus to children even in remote schools to do well, and second it will improve the chances of people from outlying areas to participate in the future leadership of the country. The great majority of Form I places should continue to be based on the national order of merit on the Primary School Leaving Examination.

5.42 We are not satisfied however that the present system of allocating secondary school places operates efficiently and equitably. One of the studies conducted for the Commission by the Institute of Development Management examined the selection and admission to Form I in 1976. It found that ten percent of the candidates who should have been eligible according to their marks on the 1975 Primary School Leaving Examination did not receive offers of admission from any of the 15 Government or Aided Schools; and that of those who did receive offers a further 13 percent did not in fact enter Form I. This is a substantial waste of talent.

5.43 Over 300 of the children receiving the best grades (A and B1) on the Primary School Leaving Examination did not receive offers of a place. Some of these were excluded because they were over the age limit. Some had not applied for admission, either because they planned to study elsewhere, or perhaps because they were not aware of the proper application procedure. Some of the B1 candidates were excluded because of scarcity of boarding places; or they may have been excluded because there were not day places available in the school in whose prescribed catchment area they lived. In yet other cases the selection mechanism itself may have been responsible, with applications becoming mislaid or delayed so that a school might admit a B2 candidate without knowing that B1 candidates from the original reserve lists were still available.

5.44 Among students who did receive offers, one in seven did not take them up. Poor communications are an especially severe problem, in view of the short time between the publication of the examination scores and the time when schools open. Also, candidates do not always learn in time whether they have received bursaries. Even if a bursary is awarded, families may not be able to raise the additional money required to pay the fees. In other cases students and parents appear to have failed to understand the workings of the selection, admissions, and bursaries procedure.

5.45 The Commission believes that Botswana cannot afford for so many eligible children to be excluded from secondary school. It believes selection and admission procedures should be reviewed. In particular the maximum age of entry to secondary school should be eliminated and there should be no discrimination against older students in the selection process. There are many reasons why children may reach Form I at an older age than usual, including late age of entry plus repetition, sickness or family and personal reasons for withdrawing for a time. There are overage pupils in many primary schools that have been taken over by Councils.

5.46 Secondary education must be made more accessible to the mass of the people from a financial point of view. We have indicated our general approach to the question of fees in paragraph 2.36. It is that fees may be justifiable, and indeed just, for levels of education that are selective; but where fees are charged, help in the form of bursaries or loans must be available for the needy. In Botswana those who are selected to Government and Aided day secondary schools pay P20 tuition fee and constitute about about a quarter of primary school leavers, or only one in seven of the adolescent population. The unlucky ones who are not selected can only get more education by buying a poorer quality education at unaided secondary schools where they must pay perhaps five times as much. Consideration of this in the light of the national principles prompts us to suggest that at Forms I-III of the public secondary school fees should be raised somewhat to bring them more into line with fees in unaided schools, and that some of the additional funds so raised should finance a bursary scheme for needy pupils at unaided schools. Since fees at junior secondary level should eventually be abolished, the increase should be moderate. The present tuition fee of P20 was set in 1965 (boarding fees have been adjusted periodically for inflation). If the P20 fee for Forms I - III was restored to its original purchasing power in 1965, the current fees would have to be in the order of P40, which would cover only ten percent of the cost of education (P387 per year per day place) in junior secondary classes.

5.47 At upper secondary level however we think that the payment by students in return for their education should be raised much more steeply because this level of education will have to be rationed for much longer. It is also more costly to Government and yields far higher benefits to the student in terms of subsequent income. A fee equal to at least half the overall cost would seem justifiable. But if Government decides on a "return payment" mainly in the form of two years national service by all Form V leavers, as we advocate in paragraphs 6.38 to 6.43, then we suggest actual fee payments should be set at the same level as in Forms I - III.

5.48 Our second observation on fees is that charges for the same category of items (e.g. books, sports fees, etc.) should be standardised between all Government and Aided schools. Until now there have been quite wide differences.

5.49 If fees are charged, the system of bursary assistance becomes extremely important as the means of ensuring that all qualified candidates enjoy equal access to secondary education. A study of the allocation of bursaries at this level, also undertaken by the Institute for Development Management at the Commission's request, reveals substantial differences between districts in the proportion of students receiving bursaries and in the actual amounts awarded -- greater differences than disparities in income would explain. The study leads us to conclude, on the one hand, that the administrative procedures need to be overhauled and a consistent and realistic value put on parental incomes. For example, the annual imputed income of only P4 per head of cattle owned is far too low, implying that a person owning 120 head of cattle might be eligible for bursary assistance! On the other hand, the actual awards should reflect the family's financial situation in the light of the current costs of secondary schooling to the student. The maximum award should cover the entire cost of schooling to the student. Also, a reassessment of eligibility for bursaries should be possible after Forms I, II and IV, in the event that family circumstances change after the original assessment has been made. We are particularly concerned about the inadequacy of bursaries because we think that this may partly explain why thirteen percent, (382 out of 2 816) of the pupils who were originally offered secondary school places on the 1975 Primary School Leaving Examination failed to take up places offered to them. (See the special report at Annex 7 which describes the results of this investigation).

5.50 *To improve access to secondary schools on an equitable basis, the Commission recommends that:*

> *A quota system should be operated in the selection process for secondary schools to ensure that the best 5 to 10 percent of pupils in every Standard 7 class or group of classes throughout the country gain admission. The great majority of Form I places should however continue to be filled as at present on strict order of merit. (R-39)*
>
> *The Ministry of Education should review and revise the secondary school selection and admission procedures so as to ensure that all eligivle applicants receive offers of places and are enabled to take them up. Age should not be a bar to Form I admission. (R-40)*
>
> *Tuition fees at Forms I to III of public secondary schools should be restored to the 1965 level, adjusted for inflation. The money so raised should finance bursaries at unaided as well as aided schools. At senior secondary*

level, fees should be raised more steeply. If however a service obligation is placed on senior secondary leavers, the same fee that is charged at junior secondary level should be applied. (R-41)

Charges of all kinds should be standardised as between all Government and Aided secondary schools. (R-42)

The Ministry of Education should review its procedures for allocating bursaries and in particular:

- *(a) the application form should be printed in Setswana and English, not only in English as at present;*
- *(b) the Ministry should strengthen procedures for checking Councils' assessments of parental income, and provide specific guidelines for the types of income to be counted and value to be imputed to non-cash items;*
- *(c) the maximum award should be fixed to cover the entire cost of secondary schooling to the student, in order to enable extremely needy but able candidates to accept the secondary school places they have won;*
- *(d) students without bursaries in Forms I, II, and IV should be permitted to apply for bursaries for the following year so as to provide for assistance to students whose financial situation changes in mid-course. (R-43)*

Progression of Pupils Through Schools

5.51 A number of representations have been made to us on the subject of automatic promotion in secondary schools. The main complaint has been that pupils are poorly motivated to perform well if they think they will be promoted to the next class, however well or badly they work. If this is a major cause of poor performance, we would favour some incentive to effort being built into the system. We think that in some circumstances headmasters should be able to require withdrawal of students from school, but we do not approve of massive, hence indiscriminate, "weeding out" of students every year.

5.52 A second problem that worries us is the drop-out of girls from the secondary course, often we are told, due to pregnancy. Among the intakes to secondary schools in the years 1972 - 1974, the wastage of girls from year to year (excluding transition from Form III to IV) is up to five percent higher than that of boys. We accept that girls who become pregnant must leave school during the period of their confinement, though we think that they should be allowed to complete a school year whenever possible. Re-admission to school should if possible be arranged, in the light of the specific circumstances. Those who must drop out of school should be assisted through correspondence and evening classes to complete their courses. However, a better solution is to prevent pregnancy among those enrolled in school. To this end education programmes should be provided for both girls and boys on entering school, directed mainly at emphasising responsibility in sexual matters. Such programmes could usefully include information on avoidance of conception.

5.53 *The Commission recommends that:*

> *Provision should be made and publicised, for heads to have power to withdraw pupils from the school for poor academic performance, but only with the sanction of their own board of governors. Parents should have the right of appeal to the Ministry of Education in each case. (R-44)*
>
> *There should be provision of information and education programmes to encourage sexual responsibility and reduce the occurrence of unwanted pregnancies among young people still in school. (R-45)*

Class Size and Teaching Loads

5.54 In 1975 the regulations governing class size in secondary schools were changed by the Ministry of Education, increasing the size of junior secondary classes from 35 to 40 and senior secondary classes from 25 to 30. This step was taken as a temporary measure to make it possible to accommodate more Standard 7 and Form III leavers in the next higher levels. It was intended that class sizes would be reduced once construction of new secondary places made it possible to accommodate substantially more students. Many teachers and headmasters have complained to us about excessive class sizes. In fact, due to wastage within the junior and senior cycles, average class sizes in 1976 for Forms I through V were 38.7, 37.1, 32.9, 28.3, and 28.9 respectively. Hardly any of the schools that complained to us appear to vary their own teaching approach or timetable to allow themselves to instruct smaller groups of 20 to 30 for some periods in the week. If the lecture method is to be used exclusively, and active methods of group work are not incorporated in the curriculum, then classes smaller than 40 lose much of their advantage.

5.55 The Commission feels that the present class size norms are not excessive, especially in view of the effects of wastage and the possibilities for reducing actual size of teaching groups by more creative timetabling to break down large classes into smaller groups. The need for group work is especially great in laboratory sessions of science classes, where forty students are too many either for effective teaching or safety. Combinations of quite large classes for science lectures and smaller groups for laboratory work have been used successfully in secondary schools in other countries with even more serious problems of overcrowding than Botswana has.

5.56 Our view regarding teaching loads generally, is that the Ministry of Education should fix a staff establishment for each school in accordance with some formula, and that the headmasters in consultation with members of staff should then allocate individual loads. In making these assignments heads will take account of such matters as amount of teaching experience, amount of marking involved for the subject taught and so on. We believe that staffing ratios for the school are reasonably generous at present, considering that Botswana is a poor country, providing as they do ratios of 1.6 teachers per class or one teacher to 21.6 pupils. In view of the staffing difficulties however, and the quite long periods that posts may be vacant, we do not propose any change at the moment. This situation should be kept under review. (see also paragraph 6.54).

5.57 *The Commission recommends that:*

> *Present class size regulations should continue for the foreseeable future. Headmasters should be encouraged and assisted in modifying their timetables to permit more small group work, especially in laboratory and practical classes. (R-46)*

Size of Schools

5.58 We are impressed with the arguments that enrolments in secondary schools should not exceed 500 to 600 pupils. The problem of loss of identity in a large mass of students becomes serious in larger sized schools. Also there is little experience in Botswana of managing large schools. We do not foresee that the curriculum in Botswana secondary schools would be so diversified that significant economies of scale would be obtained by enlarging schools beyond this level. In any event, once the proposed strategy of day junior secondary schools comes into effect, the normal school size will be well below 600 pupils. For those secondary schools that are already over 600 enrolment, there should be at least two deputy heads, and an academic structure of subject heads and subject teachers. A parallel structure of staff with pastoral and student welfare responsibilities is also necessary. The social organisation of the school may be either on a vertical 'house' basis, grouping pupils from different age-groups and forms in one house; or if preferred it can be on a form or year basis which groups together those of the same age and grade under year-heads or form co-ordinators.

CURRICULUM

Curricular Objectives and Approach

5.59 The Commission emphasises that curriculum is more than a series of subject contents. In many of our discussions in Botswana about curriculum the conversation was reduced to different ways of dividing up forty periods a week between subjects or subject areas. If the whole purpose of education was to make people knowledgeable in certain specified areas, this approach might suffice. But education involves more than this. In Botswana it involves helping young men and women to absorb and understand the meaning of the national philosophy and principles and to build their characters and lives on the basis of these values. Becoming educated means acquiring confidence, skills and abilities, and the capacity to persuade, organise and act; it means developing an aesthetic and moral sense.

5.60 These would be ambitious aims to pursue in any school system but they are all the more so in a system which suffers from a disastrous instability in its teaching force. The Commission is under no illusions about the difficulties of basing the curriculum on the wider objectives of education, yet cannot overstress the importance of moving in this direction. This aim requires teachers to think in terms of the experiences, skills and attitudes they want to impart, not just the knowledge to be gained. Teachers must relate to the pupils as people, not just as receptacles for cognitive material. This leads us to consider that learning might sometimes best take place outside the classroom, through investigations in the library, through observation in the fields or the market, and in group discussion or project work, in preference to formal instruction and written exercises. In curriculum design the teaching approach is as important as the content.

5.61 In this connection we would like to see schools develop and make very much more use of their libraries, both as part of the regular curriculum and for recreational purposes. The Commission's achievement study indicated low levels of reading competence at the secondary level. Libraries can play a major role in improving reading competence. Work assignments should be set which require students to find and interpret material on their own from a variety of sources. Self-study skills are potentially important for all students, whether they will continue in higher education or enter jobs. We endorse the observations of the Secondary Task Force on the subject of reading and library work, in particular the suggestion that library staff should be trained.

The Commission recommends that, as a prelude to the provision of trained staff in all secondary school libraries, the Ministry should encourage headmasters to appoint teachers and students as library assistants, and a Library Adviser should be included on the Inspectorate. (R-47)

Curriculum Content

5.62 We believe that the task of the secondary school curriculum is to provide a broad basis for life, for further training and work, which implies studies from a number of different curriculum areas for all pupils. Particularly at the Senior Certificate level, however, there should be some scope for optional choices allowing students to pursue their own particular interest in greater depth. But basically we are in favour of a comprehensive type of school and a curriculum with a large common content. We do not support strongly differentiated schools or differentiated streams within either junior or senior secondary school programmes.

5.63 The curricular areas which all students should study throughout their courses are Tswana Culture, English, mathematics, science, social studies and practical subjects. We envisage that at junior level the curriculum would consist of the same six basic elements for all, except that schools might vary their practical subject offerings according to the particular location and facilities of the school. The Commission's survey (Annex 1) found that levels of mathematics and reading competence among secondary students in Botswana are very low. Even though junior secondary students have passed through a severe selection process eliminating four of every five candidates for public secondary schools, the great majority of those in Form III have not achieved sufficient competence in mathematics and English to be successful students at higher levels or, one fears, to be effective workers in modern sector employment. Although all six of the curricular areas outlined above are important, fundamental competencies in mathematics and in language communication (including Setswana) are of special importance. The teaching of all subjects should reinforce the development of these basic competencies.

5.64 Each of the six curricular areas should be offered for the three years of the junior secondary cycle, as follows:

Tswana culture:	Emphasis on language study, using Setswana Literature as a vehicle, and developing students writing ability; also incorporating study of the music and art of the culture.
English:	Development of abilities to read, write, speak and understand. Special emphasis on reading, including reading for pleasure, because this skill is so instrumental in all other studies.

Mathematics:	Thorough competence in all basic arithmetical operations by the end of Form I; development of basic mathematical reasoning and problem solving (with practical and real-world orientation);
Science:	Integrated science, as presently being developed at the junior secondary level (Science by Investigation in Botswana). Effort should be made to relate science study to other subjects.
Social Studies:	Botswana studies and world studies (history, geography, current Botswana society and economy); should incorporate some concepts from the Development Studies course.
Practical studies:	Practical courses should develop the basic understanding required to use common tools effectively and safely. An element of technical drawing should be included. Practical studies should be linked to real world applications and there should be pre-vocational orientation to the world of work.

The curriculum for all students should provide for one or two periods of physical education/games.

5.65 The Commission places particular emphasis on the need for curriculum continuity between junior and senior levels, both in the interim period before the new structure comes into effect, and later. We have heard many complaints that the Junior Certificate course does not dovetail with the Cambridge School Certificate course in many subjects, so that the five years some students spend in secondary school do not represent a continuum, as they should. It appears that this charge relates to sequencing of material and the occurrence of overlaps, duplications and gaps; to the failure in some cases of the Junior Certificate course to cover material which the Cambridge course assumes as a starting point in its syllabus; and to differences in orientation between the two courses in regard to the type of intellectual skill being developed. These are problems that the new curriculum unit proposed in chapter 8 should tackle. If a coherent course is to be constructed over the secondary grades, it is important to work out a proper sequencing of what has to be learned in terms of knowledge and skills. In so far as there are intrinsic hierarchies and sequences of contents, requiring one topic or skill to be learned before another, these contents should be introduced into the syllabus in logical order. To the extent that past difficulties have been caused by having different examination boards working at the different levels, we hope that our proposals for the creation of a Botswana Examinations Council responsible for all school examinations in Botswana will bring about an improvement in the position (see paragraph 5.80).

5.66 At the senior secondary level we envisage that the curriculum would be divided into perhaps eight units and would offer each student six common units, one from each of the six subject areas already identified, plus two additional optional units from any area or areas. Physical education/games would also be included for these students. The kind of scheme we have in mind at upper secondary is as follows:

Curriculum Area	Compulsory Offering	Optional Offering (Any two from this list)
Tswana language literature and art:	Tswana language literature and art	Art, music, drama
English:	English Language	Literature
Mathematics:	Mathematics	Additional Maths
Science:	One science subject	Additional science subjects
Social studies:	Botswana and World social studies	World or regional history, geography, or economics
Practical subjects:	One practical subject	Other practical subjects or technical drawing.

5.67 We believe that a scheme of this kind would enable Botswana to combine the advantages of a broad general education for all students with some more specialist orientation. We note that if students are to be permitted to take more than one practical subject at Cambridge level, University of Botswana and Swaziland regulations on entrance qualifications may have to be adjusted so as not to penalise candidates who have pursued a relatively practical programme. Our more detailed observations on particular subject areas at secondary level are set forth below.

5.68 Tswana Culture: As we have emphasized throughout this Report, the Commission believes strongly that Tswana language and culture must be part of the intellectual development of every child in Botswana. This subject should receive due emphasis as a source of both the ability to communicate in the national language and a sense of national unity. The present Setswana curriculum, being very differently oriented, does not accomplish either of these ends and should be fundamentally revised and strengthened.

5.69 Language Studies: It is of paramount importance to the national consciousness that every citizen of the country should be fully proficient in Setswana. The Commission therefore recommends that French should no longer be an alternative to Setswana in the secondary curriculum. We appreciate the role of French as a language of African unity, but since Botswana does not border on any French-speaking country, the opportunities for the average Motswana to use French are very limited. Batswana entering business or diplomatic careers that require French could take intensive courses later in life.

5.70 The Commission emphasizes, for the senior secondary level as for all levels, the crucial importance of English competence (reading, writing and speaking) not only for further academic study but also as a preparation for work and adult life. The main aim of English studies should be to develop such competence, and the examination set at the end of the senior cycle should reflect this aim.

5.71 Mathematics: The mathematics course now offered at senior secondary level is the Cambridge syllabus "C". based wholly upon the "modern mathematics" concepts of mathematics teaching. Faculty members at the University have indicated that this curriculum does not provide an adequate foundation in the "traditional" tools such as algebra to prepare Form IV leavers for science, economics, statistics and other university courses. The University must therefore teach traditional mathematics, that should have been taught at the secondary level, to university entrants. Others have commented that the modern mathematics curriculum, in addition to being irrelevant to either real world applications Batswana are likely to encounter or to post-secondary studies, places heavy emphasis on a specialized mathematical vocabulary. This is an added burden for those students who have a weak foundation in English and tends to discourage children from pursuing mathematics studies. The Commission advises that the possibility of changing to a curriculum combining traditional and modern mathematics (such as the Cambridge syllabus B or similar syllabus) be considered. This review should also include consideration of the proposal by the Mathematics Panel for an alternative to SC mathematics for some students who have difficulty with mathematics at this level.

5.72 Science: All pupils should study at least one subject in science at senior secondary level, and this should be taken in the Senior Certificate Examination. No single subject should be regarded as compulsory and schools should have the freedom and flexibility to offer science courses suitable to the ability, needs and interests of their pupils. Also factors such as teacher availability, laboratory space etc. should influence the choice of science subjects.

5.73 Social Studies: The approach to social studies at present is structured in terms of separate non-compulsory history and geography courses and oriented toward the Cambridge examinations, which are set for Southern Africa. We have suggested that the teaching of social studies should emphasize Botswana and its relationship to the world. At the junior level this is especially desirable in our view, although junior secondary students should obviously have an understanding of the scope of history (and Africa's important place therein) and of world geography. At the senior level it is desirable for social studies to "look outward" to a greater degree than the junior course. The focus should still be, in our opinion, an understanding of Botswana's place in the world -- historically, geographically, economically and socio-culturally. This requires a knowledge and comparative view of other countries. The Cambridge syllabi for history and geography now in use have been specially modified for southern Afircan countries and this is a desirable development. There is still fairly heavy emphasis in the syllabi upon the Northern hemisphere and little attention to the problems of economic development. The Commission has been interested in the concept of Development Studies, as pioneered in Botswana and now taught in Lesotho and Swaziland and examined at the Junior Certificate level. While this course is still evolving and has not achieved its full potential, the general concepts underlying the proposed new Development Studies syllabus are exciting and worthwhile. If it should be decided to develop an integrated social studies curriculum at the senior secondary level, we would suggest that aspects of development studies could well be used as a unifying theme.

5.74 Practical Studies and Practical Work: Our proposals in this area have fundamentally the same aim as those of the Secondary Task Force, but employ a different approach. The Task Force suggests that all students at the junior level should have an opportunity to choose among several practical subjects, including agricultural science, home economics, woodwork, metalwork, practical skills, and technical drawing, and that each student should take at least one practical subject every year. We doubt whether time and resources could be found for this, for it would involve the provision of large numbers of workshops and much expensive equipment and, because workshop periods should generally be in half classes, it would be difficult to meet. Moreover, there is a certain artificiality about the teaching of practical subjects in classrooms and workshops, removed from a real-life context. Instead we recommend that all students should take one examinable practical subject from among agricultural science, domestic science, a craft skill (woodwork or metalwork), technical drawing or a commercial subject at junior level. At senior level schools should try to offer two or three options with one practical subject compulsory for all students.

5.75 As we have emphasized throughout our Report, we do not see the practical subjects as being the only, nor necessarily the most effective, way of achieving a practical orientation to the curriculum. To supplement the compulsory practical subjects therefore we would like to see the development of a practical orientation in the teaching of all subjects. Wherever possible throughout the curriculum, instruction should include project work and an applied approach to solving problems.

5.76 In addition, two or three hours per week of practical work should be included in the curriculum. Practical work should include school and/or community projects, preferably under the auspices of the local community development association where one exists. Students should work in groups of manageable size. Tasks undertaken in this way could include construction and farming, land clearance, social services, or repair and maintenance. The work should be purposeful and not just a form of manual labour whose object is not understood by those taking part. The possibilities of production work of a simple kind in horticulture, agriculture, or basic crafts should be explored particularly, since the lessons of commercial production are important for anyone preparing to earn a living using these skills in self-employment. Teaching staff should participate in and help to lead student working parties, but each school will need to designate one or two members of staff as coordinators of the practical work to maintain contact with community leaders. School heads should assign such teachers lighter classroom teaching loads.

5.77 The Timetable

Time tabling of the junior course should not prove difficult since there will be a common curriculum. At senior level timetabling may be more complicated, but since our proposals assume that each unit will represent the same amount of study time, it should be relatively straightforward. We would like to emphasize in this connection that greater flexibility in the timetable will be obtained if more use is made of self-study methods of learning. We would also suggest that headmasters should be given discretion to change the pattern of 40 x 40 minute periods (26 hours 40mins) per week. If they find it more convenient to use periods of 35, 45 or 60 minutes, they should be allowed to do so, provided that the basic instructional time (excluding "prep") is within the range of 26-28 hours per week.

5.78 *The Commission recommends that:*

There should be a common curriculum at both junior and senior secondary levels, consisting of Tswana Culture, English, mathematics, science, social studies and practical subjects, to be taken by all pupils and examined at each level. (R-48)

At senior secondary level the common core subjects should account for six units of an eight unit curriculum, and a further two units should be taken from any of the six areas, allowing the students to give a more specialised orientation to their studies. (R-49)

Particular attention should be given, in redesigning the curriculum and syllabus, to continuity between the junior and senior secondary levels. (R-50)

Tswana culture should concentrate on study of language, with emphasis on use of Setswana as a medium of communication in the modern world, and should incorporate elements of art and music. (R-51)

Competence in English should be accorded high priority in the secondary curriculum. French should no longer be offered as a normal school subject. (R-51)

Reconsideration should be given to the most appropriate mathematics curriculum for Botswana, including the question whether a curriculum combining traditional and modern approaches might be preferable, and the possibility of an alternative syllabus, with more emphasis on practical applications, at senior level. (R-51)

At the junior level integrated science should be studied by all pupils. At the senior level all pupils should take a science subject, whose identity should depend on availability of resources and pupils' ability and interest, and further subjects should be available for those who wish to specialise. (R-51)

The teaching of social studies should emphasize Botswana and her relationship to the world, with particular emphasis on aspects of development studies. (R-51)

All students should take at least one practical subject throughout their course. In addition all subject teaching should be given a practical orientation, and two or three hours per week of practical work for the school or community should be included in the curriculum. (R-51)

The Ministry of Education should make suggestions to schools for allocation of time among subjects within a basic 26 to 28 hour week. Heads should be free to vary this according to the resources of the schools and the interests of the pupils. (R-52)

EXAMINATIONS

Organisation

5.79 The curricular objectives discussed in preceding sections can only be achieved if examinations and assessments are the servants of the curriculum, and this is difficult to achieve if a country does not control the assessment of its own educational system. What may then happen is that an examination system run by an external agency may not assess performance in terms of curricular objectives set by an internal body. When secondary examinations are set by two different agencies, as is the case in Botswana, true control of the curriculum is indeed difficult. There is no doubt that part of the explanation for the discontinuity between Junior Certificate and Senior Certificate stems from the fact that Junior Certificate is a regional examination, offered in conjunction with Lesotho and Swaziland, while Senior Certificate is run by the Local Examinations Syndicate, Cambridge University, England.

5.80 We are concerned that Botswana should exercise greater direction over the curriculum and the educational process in the schools through control of examinations. The Research and Testing Centre (RTC) formerly a branch of the Regional Testing Centre, is principally concerned with the Standard 7 examination. Responsibility for the regional Junior Certificate Examination now rests with the Botswana, Lesotho and Swaziland Examinations Council. The future pattern that the Commission feels to be most desirable is for a national testing centre, developing out of the present RTC within the proposed Curriculum Development and Testing Unit, to undertake the development and setting of tests at the primary and Junior Certificate levels and ultimately for some Senior Certificate subjects. This would be a technical and operational unit staffed by testing specialists and administrative officers. There should also be an independent Botswana National Examinations Council that would provide direction on examination policy and independent oversight of the administration of the examination and the maintenance of standards of marking. This Council should include representatives from the Ministry of Education, the University, and possibly the secondary schools, the teachers' union, and other institutions. Co-operation and consultation between the Centre and the Council and any regional institutions that emerge from the regional Examinations Council would be desirable in the areas of objectives of tests at the several levels, techniques of test development, item banks, analysis of test results, comparability of standards and other technical and policy matters.

The Junior Certificate

5.81 Examinations can test knowledge of facts and techniques (depending heavily upon memorization) or they can test other abilities: ability to explain how a fact fits into a wider context (explanatory items) and ability to draw inferences from given facts (reasoning items). Analysis of junior certificate examinations from recent years indicates that there have been very few items that test explanatory and reasoning powers. This means that teachers have not sought to develop students' explanatory and reasoning skills but have emphasized rote command of facts.

5.82 The Commission has also received many representations about the need to maintain consistent standards. One must distinguish a first objective of examinations, namely assessing the levels of competence students have achieved, from a second objective of establishing qualifications for entry into the next higher educational level. The second objective has dominated in Botswana to such a degree that it has not been possible to use the Junior Certificate scores for the first purpose to indicate absolute levels of competence. A third objective of examinations - provision of 'feedback' indicating how to improve the educational process - had been totally neglected.

5.83 It is a usual procedure to convert low examination scores to standardized scores for purposes of comparison between students, as in a selection examination. Standardisation in the Botswana, Lesotho and Swaziland region has resulted in inflation of the pass rate in the Junior Certificate examination to unrealistically high levels. Part of the reason for this appears to be that increasing numbers of poorly prepared candidates from unaided secondary schools and continuation classes have sat the Junior Certificate in recent years. Most of these candidates score low marks, which decreases the mean score on which standardization is based. After standardization this makes it appear that candidates from public schools do very well, which creates motivational and other problems. For this reason raw scores as well as standard scores should be made available. A second problem is that the ranges of standard scores corresponding to an 'A' or other letter grade have changed from year to year in accordance with the number of places available for admission. A student obtaining an 'A' in one year may be better or worse than students obtaining the same grade in other years. Although Junior Certificate results have appeared to be improving, declining pass rates on the School Certificate Examination at Form V indicate that the trend in Junior Certificate results is misleading. We believe that the value attributed to a particular letter grade should be held constant from year to year, and that admission requirements should be adjusted when required numbers change.

The Senior Certificate

5.84 At senior secondary level a Botswana Certificate of Education should be established, initially in conjunction with the Cambridge Board. Students in Botswana should sit for this certificate rather than the present Cambridge Overseas School Certificate. Many of the papers would be the same as at present -- in e.g. mathematics, science, English -- for those subjects where the principles, subject matter and context are international. Where the context is largely national -- as for example in social studies -- a special paper would be introduced. We suggest that a Botswana Certificate of Education would only be awarded to those who had entered and obtained passes, not necessarily credits, in each of the six subject areas listed earlier. Separate subject credits (like the present "O" level pass) could be awarded to those not entering or passing the full certificate, but doing adequately in individual subjects. Grades awarded and indicated on the certificate would denote the same level of attainment as present Cambridge grades (1 - 9).

5.85 The Commission believes that arrangements of this type would be acceptable to the Cambridge Syndicate, which already has similar schemes with Malaysia and other countries. The advantage from Botswana's point of view would be that it could derive all the benefits of Cambridge expertise and assistance in establishing the Botswana Examinations Council and in running the examination for as long as needed. It would also retain the advatage of having an examination of recognized standing -- since a large proportion of the papers sat would be international papers graded on an international standard -- which would enable Batswana students to continue to have access to higher courses abroad. At the same time special Botswana papers and syllabi could be established in areas like social studies where it is especially important to study the Botswana context. Botswana would be able to establish her own conditions in terms of subject combinations and grades required for the award of a certificate.

5.86 The advantages of this hybrid arrangement over the present purely Cambridge examination, over a purely local examination, or over a regional examination, appear to us to be decisive. We certainly favour regional co-operation to the extent that it is functional. We do not see the advantage of a joint regional examination at senior level however, in view of the fact that Botswana's interest lies in having internationally recognised examinations in some subjects and specific national content in others.

5.87 *The Commission recommends that:*

In order to ensure that school examinations become the servant of curriculum objectives, Botswana should take steps to secure greater control over the examinations process by:

(a) establishing a national testing centre as part of the proposed Curriculum Development and Testing Unit to undertake the development and organisation of examinations. (R-53)

(b) setting up a Botswana National Examinations Council to provide direction on examinations policy and to oversee the administration of examinations and the maintenance of standards of marking. (R-54)

(c) Instituting at senior secondary level, and initially in conjunction with the Cambridge Board, a Botswana Certificate of Education. (R-55)

The Junior Certificate should contain more items testing explanatory and reasoning powers. (R-56)

Consideration should be given to standardising scores on the Junior Certificate separately for public and for unaided schools. Raw scores as well as standard scores should be made available. (R-56)

At senior level the papers for the proposed new Botswana Certificate of Education should be in part international papers and in part local papers geared to the Botswana context. The Botswana National Examinations Council should determine the subject combinations and grades required for the award of a Botswana Certificate of Education. (R-57)

The actual grade in each subject should conform with international standards in terms of the level of performance they denote in order that Batswana can use their certificates where necessary to gain admission to courses abroad. (R-57)

Sharing of experience and facilities on a regional basis should continue in various technical areas. (R-58)

CAREERS ADVICE AND VOCATIONAL GUIDANCE

5.88 This important aspect of secondary education in Botswana has been somewhat neglected, even though the Research and Testing Centre has made an admirable beginning in aptitude testing and in providing conferences for careers staff. Pupils need help in identifying their own special talents and abilities through aptitude testing, and also require exposure to different opportunities in the adult world. Much better information on career options should be provided to students most of whom have little understanding of the type of work involved in many jobs or of the qualifications required for entry. We regard visits to places of employment as important and we think that special funds should be made available, especially to more isolated schools, to visit centres where a wide range of occupations may be observed. We regard the past reluctance of Government to allow private employers to visit schools with career information as exceptionally short-sighted. Indeed we would like to see employers arrange short attachments for secondary school students during the school holidays to enable them to observe the world of work in action.

5.89 The present system of careers staff in secondary schools, while valuable in so far as it goes, provides no time allocation for careers counselling duties. This does not lead to the fullest effort, commitment and effectiveness on the part of the careers staff. The Commission recommends that the careers staff be relieved of teaching duties for a specified number of periods each week, and that the Ministry of Education and the Directorate of Personnel take steps to provide them with printed information on careers that will make their tasks easier.

5.90 *The Commission recommends that:*

Active encouragement be given to all employing agencies, whether Government departments, parastatal bodies or private firms, to visit schools with career information. (R-59)

The Ministry of Education and/or the Directorate of Personnel should undertake to prepare and provide information booklets and other material to inform students about career alternatives. (R-60)

Each school should have a male and female member of staff designated as careers staff, and allowance should be made for this work in the form of periods free from teaching. (R-61)

Courses and conferences should be arranged each year for careers staff by the Ministry of Education in conjunction with other agencies. (R-62)

SCHOOL AND COMMUNITY

5.91 The Commission has learned from many submissions and from its own visits to secondary schools that the community aspects of secondary education are weak, both in terms of the social/community life in the school and in terms of the link between the school and the community in which it is located.

The social life of secondary school students appears to be limited and artificial. There is little personal interaction among pupils, between pupils and staff, or between school and the neighbouring people. What appear to be missing are opportunities for students to engage in informal discussion, sports and hobbies, group work, expeditions and visits to places of interest. The responsibility for the personal development of secondary school students rests largely with the teachers. As we noted earlier, they must see their concern as being with the adolescent as a whole person, not merely with his or her academic and technical abilities. We feel that it is undesirable for teaching to be wholly separated from personal supervision of students, which is entrusted to boarding masters and matrons. If there must be a division of labour along this line, it is preferable for teachers to alternate in the role of boarding masters; though ideally, all teachers should participate in both types of tasks concurrently to some degree.

5.92 The potential benefits of links between the school and the outside community have been even less explored. The Commission is convinced that the concentration of talent in both teachers and students, and the material facilities of secondary school, could be tapped to serve the community at large. This should in turn make the students appreciate their responsibilities to the community and see themselves less as a privileged class. Although most of the Government and Aided secondary schools have been located near large populations in the major villages and towns, the local people have usually not felt that the school was a resource for them and the students, many of whom are boarders, do not feel a part of the surrounding community either. Many of the unaided schools have achieved closer links with the community because they were formed by local initiative, they largely serve students from the environs of the school, and receive continued financial and other support from the community. We hope that when junior secondary schools are built as day institutions even in the more outlying villages, the possibilities will increase for mutual cooperation and concern to develop between the schools and communities.

5.93 The efforts by staff and students in Government and Aided secondary schools to work with their communities have thus far been sporadic. Two schools have adult educators on their staffs, but aside from the occasional use of school facilities for adult classes there is very limited interaction between the school and the community. Only in a few institutions do students engage in community development activities on a regular basis.

5.94 The Commission sees a number of ways in which secondary schools can be linked with community concerns:

(a) Shared facilities: School premises can be made available for use by clubs, Brigades, evening classes and even by the unaided secondary schools for academic or recreational activities during evenings and vacations.

(b) Social services: Students and teachers can offer their services to tutor out-of-school youth and adults in literacy, or to help the handicapped.

(c) Community leadership: Members of the District Development Committee, for example, may regularly visit the schools, and take an active interest in their welfare. Teachers in exchange could participate in community committees to plan development or recreational activities for the area.

(d) Board of Governors: Members of the community could sit on boards or trusts to oversee the affairs of the school, as recommended in paragraphs 5.96-5.98.

(e) Development projects: Communities can contribute finance, materials, labour and skills to development projects at their schools, while students and staff can reciprocate with aid to community projects.

5.95 It is essential for the links that develop between schools and communities to contribute to and strengthen the educational programme, not divert energies from it. This will require a genuine policy commitment to reorient the schools towards their communities. In this regard the Commission reiterates the need for flexibility since schools which are located some distance from large population centres may not support such community activities easily. The efforts of the teachers, community leaders and government officials to define an appropriate community emphasis for the new secondary school to be built at Kang may serve as a prototype for such planning in other secondary schools. Organisational or staffing changes to facilitate community activities should remain experimental for a time, since an adult education or agricultural extension officer might work effectively in some schools, but differences in local conditions make a uniform, nation wide programme impractical. In order to identify activities, that will make a positive contribution to communities, representatives of schools (including students' representatives) could meet with District Development Committees (or Village Development Committees in more remote areas) to discuss ways in which the school can provide meaningful service. In so far as they might require any special support from Central Government funds, proposals identified in this manner would then be submitted to the Ministry for approval.

The Commission recommends that each secondary school in conjunction with local community representatives should formulate proposals for co-operative activities. (R-63)

BOARDS OF GOVERNORS

5.96 At present, only a handful of secondary schools in Botswana are directed by boards of governors. In most of these cases, the boards represent missions or other special groups which founded the schools or otherwise lend support. We have been impressed with the flexibility and the greater degreee of lcoal involvement that may be achieved in a secondary school under a board of governors.

5.97 Boards of governors should be established and should be legally empowered to receive and spend funds, an arrangement which would give the boards flexibility in buying, selling, or renting, raising money, or owning and repairing vehicles for example. If schools are to encourage greater self-help and local initiative on the part of students and communities, they must have a degree of autonomy. Boards of governors can be the means of providing such autonomy, while keeping the school in touch with the local situation and providing a channel for private funding if available.

5.98 The legislation providing for the establishment of autonomous boards of governors for all secondary schools should also enable the Minister of Education to issue a statutory instrument which will specify:

(a) The duties and powers of boards of governors,

(b) How the boards are to be constituted, and

(c) Relationships between the boards and the Ministry.

The Commission suggests that they might include the District Education officer, and another officer appointed by the Ministry, the Headmaster, a representative of the parents' association, a delegate of whatever mission, foundation, company or other important local institution concerns itself with the school, in addition to representatives of the local community.

> *The Commission recommends that boards of governors be established at all senior secondary schools with responsibility for the planning and management of the school facilities and for relating the school to the community. The necessary legal provisions for setting up such autonomous bodies at all secondary schools should be instituted. (R-64)*

VOCATIONAL EDUCATION

5.99 In the important area of vocational education, the Commission sought the advice of Dr. H.W. French, who has prepared a separate consultant report on vocational education. His complete study is presented as Annex 3 to this Report. Our major recommendations, arising from Dr. Frnech's study and from our own deliberations, are set forth in the following paragraphs.

5.100 The field of vocational education appears on the surface to be somewhat complex in Botswana, encompassing a number of formal training institutions such as the National Centre for Vocational Training (NCVT), the Botswana Training Centre (BTC), Botswana Agricultural College (BAC) and National Health Institute (NHI). In addition to these institutions, the Brigades offer vocational education as well (as discussed in Chapter 7). Finally there are multiple small training programmes operated by Government, by parastatal agencies and by the private sector. Such a multiplicity of vocational education and training programmes is inevitable, and on the whole healthy. The Commission urges, however, that Government review the array of programmes to identify possible ways in which training might be rationalized by using existing facilities, especially the NCVT more effectively.

5.101 In its discussions of primary and secondary education the Commission has emphasized that the courses offered at each level can and should be more practical in their orientation. By this we mean that the teaching of the basic "academic" skills should provide not only a sound foundation for further formal study but also an appreciation of, and a degree of preparation for, the world of work. This can be done through using subject matter and examples from the world with which Batswana pupils are familiar, developing basic manual dexterity, and providing through all school subjects an orientation toward technical and scientific knowledge and toward work. We do not mean that the formal schools should provide specific, job-related skills. But there is a great deal that can be done to stimulate interest in and a positive attitude toward practical skills. Such a foundation in the primary and secondary schools can motivate able and technically-inclined students to pursue later job-related courses as a first choice. Botswana is not yet producing the skilled technical manpower it needs. The general education education system can and should make an important contribution by influencing students' attitudes and orientation.

5.102 The concept of a technically oriented high school at Selebi-Pikwe which is referred to in Annex 3 is worthy of further consideration. Such a technical high school would not depart in principle from the pattern of senior secondary education proposed by the Commission. Its distinctive character would be in the provision of specialist facilities and teachers for practical and technical subjects. The school would have a positive orientation toward the pursuit of technical and practical studies, with the expectation that many students would select their optional subjects (see paragraph 5.66) from the practical group. Local industry could usefully be associated with such a development.

> *The Commission recommends that the possibility of giving a technical orientation to the existing secondary school at Selebi-Pikwe be actively explored. (R-65)*

5.103 The National Centre for Vocational Training has experienced difficulties in the past with regard to the structure and content of its courses and the acceptability of its graduates to employers. Actions are now being taken to remedy this and the the Centre's Industrial Liaison officer clearly has an important role in acquainting public and private employers with the new programmes. The capacity of the NCVT, together with that of the Brigades, is sufficient to meet the country's needs for formally-prepared workers at the "first skill level" (Trade Test C).

In fact the facilities at the NCVT need to be utilised much more intensively to produce more first skill level workers. It could also provide higher level vocational and technical training and training for teachers of vocational and practical subjects. No additional vocational training institute like the NCVT will be needed in Botswana unless greater industrial development takes place than is at present foreseen.

5.104 *The Commission recommends that:*

> *The NCVT should continue the development of its new course structure, with continuing evaluation to ensure that the courses meet the needs of employers. (R-66)*
>
> *The facilities at the NCVT should be used not only for existing full time courses, but also for a wider range of courses covering aspects of training presently being undertaken by other bodies on an uneconomic basis. The NCVT should contribute to the training of vocational and practical subject teachers and provide part-time or evening study courses. (R-67)*
>
> *The present programme of technician training should be continued if there is sufficient demand, but not expanded unless demand for larger numbers becomes apparent. (R-68)*

5.105 Because vocational training is strongly influenced by the trade tests that students prepare for, and because employers should perceive the tests as relevant and valid, trade testing is critically important. The Botswana Trade Test Certificates should continue to be the basis for assessment, but various steps should be taken to strengthen them.

The Commission recommends that:

> *The present system of trade testing should be reviewed. The standard of the Trade Test C should be raised. Grade B tests should be related to specialised job qualifications at a higher level of skill and specialisation than the C tests. Grade A should be awarded to craftsmen who have acquired an adequate number and range of Grade B certificates in their trade. (R-69)*
>
> *That tests should rest upon clear job specifications, the compilation of which should begin immediately. Suitable periods of relevant experience should be required between certificates. (R-70)*

Trade testing should remain the responsibility of the Ministry of Home Affairs/Labour, but specialist staff at the NCVT should be involved more closely in the trade testing process. (R-71)

5.106 Apart from the National Centre for Vocational Training, there are three other prominent training institutions offering full-time vocational courses. These are the Botswana Agricultural College (BAC), the National Health Institute (NHI), and the Botswana Training Centre (BTC). Dr. French in his report at Annex 3 has made observations on the future path of development that each of the three institutions might best follow. The first two, BAC and NHI, serve the needs of their parent ministries more or less exclusively, and we do not feel that we can usefully add to Dr. French's comments. The Botswana Training Centre offers training for a range of occupations in the administrative, commercial, clerical and secretarial categories, for which numerous public and private employers recruit. The Commission strongly endorses Dr. French's conclusion that the BTC should evolve as rapidly as possible from being a Government training centre to become a national college of commerce and administration, serving the private as well as the public sector. We would like to see it offer a wide variety of courses on a part-time, evening and correspondence basis as well as full-time.

The Commission recommends that the Botswana Training Centre should become a national college of commerce and administration, training personnel for private as well as public sector employment, and offering a wide variety of opportunities for part-time study. (R.72)

CHAPTER 6

Teachers and Their Training

6.01 At every turn in its deliberations on the ways to reform and expand education in Botswana, the Commission has had to ask whether sufficient teachers of the right competence and the right motivation can be found to implement the proposals. The Commission is convinced that the quality of teaching is the most important influence on the quality of the education provided in schools. Our assessment survey (Annex 1) indicates that students' achievement levels are closely related to the proportion of trained teachers in a school. Because an adequate supply of well-trained and motivated teachers is essential for improvements in education, we devote this separate chapter of our Report to the subject.

IMPROVING THE STATUS OF TEACHERS

6.02 It is perhaps a truism to state that only a person who is content with his work will do it well. Individuals must have confidence in the importance of what they are doing if they are to perform successfully at their job. If other people do not respect the work of the teacher, teachers themselves will not take pride in their profession or pleasure in their work, and children's learning will suffer.

6.03 The Commission has reviewed various kinds of evidence that the teacher in Botswana today is poorly regarded, indeed less well so than in the period before and just after Independence. To some extent a decline in the relative prestige of the teacher is normal at a time of rapid educational expansion. As educational opportunities increase, more and more people in the community come to have as good an education as their former teachers. But we believe that the deterioration of the position of the teacher in Botswana has gone beyond acceptable limits, and needs to be arrested and reversed.

6.04 Admittedly it is not easy to measure "the status of teachers" according to any one scale but we have two main bases for our concern. First, those submitting evidence to the Commission, including both teachers themselves and members of the general public, were virtually unanimous in their view that teaching as a profession does not at present command sufficient respect. Not only is teaching low on the scale of preferences indicated by students when opting for further education and training, but, regrettably, the Ministry of Education has actually diverted some of the ablest students applying for admission to teacher training away from teaching and into other courses of study. Few of the students at Junior Certificate or Cambridge levels put teaching high on their list, and first or second class pass holders, in particular, opt for other courses or jobs. As a result, teacher training courses attract only those entrants with low examination grades who could not gain admission to the programme they prefer. In 1976, 351 students entered the teacher training colleges and 219 of these had Junior Certificate. But of the 219, only 27 or twelve percent had second class passes and none had first class passes. These 27 entrants represented only three percent of all the 984 first and second class passes on the Junior Certificate examination in 1975.

6.05 A third source of evidence, yielding rather unclear indications hwoever, is the turnover of teachers. A contented profession will probably be a fairly stable one. On the other hand, high turnover is an indication of low morale in schools and colleges, and dissatisfaction among teaching staff results in difficult learning conditions for children in the classroom. The Commission decided to investigate the turnover and wastage of teachers in some detail and we include the results of our survey in Appendix Table A-9. Evidence we collected on the reasons primary teachers leave their posts indicates that much of the turnover is a result of transfers between schools and leave, presumably temporary, for illness or pregnancy. Out of a sample of 127 trained and untrained primary school teachers on whom we had information concerning their reasons for leaving a teaching post, we could identify only three who had definitely taken a job outside teaching. Although our data in this sample were incomplete they suggest that actual wastage of primary teachers--ie the permanent loss of teachers from the teaching force-- is probably no more than three percent per year at maximum, and this is confirmed by the official education statistics.

6.06 In interpreting the apparent stability of the teaching force at primary level, one should bear in mind two contributory factors. The first is that teachers are now bonded for a period of five years' service, which reduces the wastage rate below the level prevailing before bonding was introduced. Second, it might be that by only recruiting those who cannot get jobs elsewhere the school system retains many who are dissatisfied with teaching but have no viable alternative.

6.07 At secondary level wastage appears to be much higher, even among Batswana teachers. An average of 22 percent of trained Batswana secondary teachers left service each year from 1972-1975 and untrained teachers had an even higher wastage rate. Many departures were temporary, for maternity or medical leave, further training, etc., but even so it is clear that the actual wastage rate is considerably above the three percent estimate used in the Fourth National Development Plan.

6.08 Whatever the precise level of the wastage rate, the Commission believes that the teaching profession in Botswana does suffer from poor morale. We think that an approach to raising teacher morale must depend on three lines of action: first raising the quality of new entrants to the profession; second, improving conditions of service; and third, providing proper professional support.

Raising the Quality of Entrants to the Teaching Profession

6.09 Here one is confronted by a vicious circle, because so long as the quality of the teaching profession is low, good new recruits will not be attracted to it. Yet the standing of the profession can only be raised by recruiting better candidates and providing them with better training. The Survey conducted by the Commission provides clear evidence of a close relationship between teacher training and student competence. So long as teaching is seen to be a profession with a third of its members untrained, and well over half having no secondary education, it will not attract able new aspirants. The situation in which third class Junior Certificate passes go into the primary teacher training colleges and poor school certificate passes go into the Teachers' Certificate programme at University of Botswana and Swaziland will continue. Some of those who the Commission has consulted have suggested that drafting of students into teacher training courses is the answer to this, and we shall discuss such a possibility later. We must state our view at this juncture, however, that drafting of unwilling students cannot be a permanent solution to raising the morale of the teaching profession; it might well impair it. A sounder solution is for the conditions of service to be improved so as to attract more teachers into the service willingly. If conditions are improved, more first and second class Junior Certificate passes can be expected to apply for admission to the teacher training colleges. Also, as the number of Junior Certificate passes increases during the 1980s, and as alternative employment opportunities in the public and private sectors become filled, better-qualified students will opt for teaching. They should be encouraged to do so rather than channeled into other training paths.

The Commission recommends that:

> *If Junior Certificate completers indicate a preference for teaching, they should be encouraged to enter the teacher training colleges, even if their Junior Certificate pass would qualify them for admission to Form IV or other training courses. (R-73)*

Improving Conditions of Service

6.10 We take conditions of service for teachers to include pay, allowances and pensions, and any fringe benefits including housing, general conditions and hours of work, career structure and promotion opportunities, and so on. Through the many submissions we have received and discussions held on the subject of teachers' conditions of service, we have learned that the problem is only partially one of absolute level of benefits. What is more at issue is the feeling on the part of teachers that they are badly treated by comparison with other groups of public servants.

6.11 The overall impression the Commission obtained from its investigation of this matter was that whilst there were good grounds previously for teachers' complaints of discriminatory treatment by comparison with civil servants, Government has recently taken action to remove most of the anomalies. It has done this both by offering teachers some of the same benefits civil servants receive, such as comparable housing allowances, and by removing from civil servants other privileges like car loans and favourable house purchase arrangements that they enjoyed exclusively in former times. Teachers now have a single employer, the Unified Teaching Service, which brings them into line with public servants under the Public Service Commission or the Unified Local Government Service Commission. One anomaly which remains is that teachers' superannuation is on a provident fund basis while civil servants get a non-contributory pension. In fact, however, it is possible that civil servants may envy teachers their option to retire at 45 taking their capital sum entitlement from the provident fund with them. In terms of holidays, no profession is as well placed as that of teaching.

6.12 The actual starting pay of teachers and their salary scales now appear to compare favourably with other public servants having the same level of education. For example, heads of secondary schools and teacher training colleges are on Superscale VI along with many heads of professional services in government, and higher than, for example, the Director of Broadcasting or the Director of Information Services. A graduate teacher with the Concurrent Certificate in Education, who has taken the same period to qualify as a non-education graduate, receives an annual starting salary P336 higher (or if the degree is science-based, P504 higher) than an ordinary graduate. The Teachers' Certificate holder receives the same as other diploma-holders, and the Junior Certificate completer does better to enter a training college than alternative studies. It is not so much in terms of pay, therefore, as of promotion prospects and of the location of the majority of teaching posts, that teaching suffers by comparison with other jobs.

6.13 Promotion Prospects and Career Structure.- Poor promotion prospects are perhaps the biggest disadvantage the teacher suffers compared with other professions. There are a number of defects in the present career structure for teachers. First, the number of responsibility posts in relation to the total teacher establishment seems on the low side, generally being in the region of 20-30 percent. We think this proportion is inadequate in the longer term and should gradually be raised, particularly for the larger schools. Current regulations provide that a secondary school qualifies for one extra responsibility post for an extra 200 pupils, even though under current staffing ratios such an increase in enrolment implies eight extra members of staff; and a similar situation obtains at primary level. As the profession matures, with more long-serving trained Batswana in the teaching force, it will be essential to provide more promotion opportunities.

6.14 Second, we suggest that the system of paying teachers be restructured over a period of years. At present different scales apply to the different qualifications of teachers, not to differences in their responsibilities. In the case of responsibility posts an allowance is paid to deputy and assistant principals and heads of department in secondary schools; and to head teachers, deputy head teachers and senior teachers in primary schools. The only exception to this rule is for heads of secondary schools, who are on a separate scale. The Commission believes that the allowances should be replaced over time by separate salary scales which provide a longer-lasting incentive to teachers to seek responsibility. It may well be advantageous to categorise schools by size and have different scales for heads and deputy heads to reflect the greater responsibilities in the larger schools.

6.15 The Commission also suggests that different scales for trained teachers not holding responsibility posts should gradually be phased out, though it might be necessary to retain different entry points to a common scale for teachers holding different qualifications; and we would envisage that for some time to come it would be necessary to have separate basic scales for 'primary teacher', and 'secondary teachers' (possibly even in future for 'junior secondary teacher' and 'senior secondary teacher'). The effect of our proposal would be to pay teachers for the job they do rather than for the certificates they hold. Heads in the same size of school would be on the same scale even if their basic qualification was different, just as the salary of an under-secretary in the civil service does not vary according to whether or not he holds a degree or other professional qualification.

6.16 Third, we consider it important that promotion ladders should exist for all categories of teacher, even the unqualified. Even if, as we recommend, pay structures are revised in future to reflect responsibility rather than qualification, professional qualifications would still be considered for promotion, and it would remain important to enable teachers to upgrade themselves to higher professional status. In present circumstances, when pay reflects qualifications more than any other factor, such possibilities are vitally important for the morale of the teaching service. We return to this subject at the end of the chapter, in discussing in-service courses.

6.17 *The Commission recommends that:*

> *The proportion of responsibility posts to the total teaching force should gradually be raised, particularly in larger schools. (R-74)*
>
> *Allowances for responsibility posts should gradually be replaced by salary scales. (R-75)*
>
> *Schools should be graded by size, and different scales for heads and deputy heads should attach to each category. (R-76)*

Over the longer term teachers' pay should be restructured so as to base differentials on responsibilities rather than on qualification. (R-77)

A career ladder should be constructed that would enable any teacher to progress to the highest point in the profession. Promotion criteria should include competence and ability to copy with responsibility. Where possession of any qualification is also stipulated, opportunities should be available for teachers to acquire this through personal study. (R-78)

6.18 Service in Rural Areas.- Many teaching posts are situated in remote areas, whereas the majority of other public service jobs are in the towns. We have already suggested in chapter 4 (paragraph 4.08) some ways in which teachers can be recruited for service in more remote areas and here we reaffirm our belief that service in remote areas is an obligation which teachers must undertake. But accepting that teachers must often be asked to go against their will to remote posts, we regard it as essential that such postings be for a specified period and that they be seen as an obligation shared by all and falling at some time on all members of the teaching force. There must be no sense of victimisation or favouritism associated with rural postings. Beyond this, we believe that Government should review the terms of service for teachers in remote areas. One matter, which affects others as well as teachers, is that the criteria for drawing local allowances should be reviewed. At present some rather remote schools and areas, in some parts of Central District for example, appear not to qualify, and this requires attention. One way of dealing with the rather arbitrary cut-off point which applies at present might be to have a scale of local allowances based on degree of hardship, rather than a geographical definition of eligible areas. We also suggest that teachers serving far from home in isolated places should receive a home travel allowance to allow them to visit their homes at regular intervals. Finally, we emphasise the need for teachers in isolated areas to feel professionally in contact through regular inspection visits and the chance to participate in in-service courses or conferences.

6.19 *The Commission recommends that:*

An equitable system of staffing rural schools, which recognises service in remote areas as an obligation on all teachers, should be developed. (R-79)

The local allowance for teachers in remote areas should be continued but the criteria for designating places where this allowance may be drawn should be reviewed and consideration should be given to differential allowances based upon degree of hardship. (R-81)

Closer professional support for rural schools, through more regular inspectors' visits to schools and invitations to *teachers to in-service courses or conferences, should be organised. (R-81)*

Assistance with travel home should be provided at regular intervals to those who serve in isolated schools far from their homes, and the Unified Teaching Service should work out a suitable formula. (R-82)

Improved Professional Support

6.20 In addition to raising the quality of recruits and improving the conditions of service of teachers, another approach to better teacher morale is through development of a stronger sense of professional identity among teachers. This is partly a matter for teachers themselves to take up through their own professional associations, but we believe the authorities have an important role to play in providing a framework and supporting services for professional development.

6.21 A major obstacle to be overcome in a country the size of Botswana is the sense of isolation and remoteness that individual teachers may easily feel if important decisions of all kinds affecting teachers and their work seem to be taken far away in Gaborone or in the district headquarters. More opportunities for two-way exchange between educational administrators and teachers, or between teachers themselves, should be created so that classroom teachers do not feel abandoned or that their contribution is unimportant.

6.22 To a large extent responsibility for improving this situation lies with the leadership of the education profession in the Ministry of Education and the Unified Teaching Service. Their decision on how far they will consult teachers on matters affecting the education service itself, on working conditions in schools, and on education policy more generally, will indicate the importance attached to teachers and to their contribution to the education service. The Commission believes that there should be wide consultation with teachers on all these matters and that involvement of teachers in the work of curricular reform will pay valuable dividends. We have seen how this is already the practice on the many curriculum panels that exist, and have been impressed by their work. Another way in which teacher status may be enhanced is by greater involvement in the affairs of the local community.

6.23 We hope that the Botswana Teachers Union will recognise its responsibilities in the development of the teaching profession. Beyond its important role in defending teacher interests and improving teachers' conditions of service, there is much it could do to strengthen the sense of professional identity amongst its members. We were heartened to find in our discussions with the

Union a readiness to assume a greater professional role. Any in-service programmes or other schemes of professional support and development which the Union might draw up for its members could deservedly attract help from the education authorities in Botswana, from international teacher organisations, and from other donor agencies. The Union could also usefully form working groups of teachers on subjects of professional concern to study problems and formulate views.

6.24 *The Commission recommends:*

Establishment or more regular use of consultative machinery at all levels of the education system, including regular professional meetings in the field for teachers and heads to express views on educational policy issues and to exchange ideas; (R-83)

Government support, including financial support, for the professional activities of the Botswana Teachers Union; (R-84)

Regular publication of a Botswana Teachers Journal which every teacher should be entitled to receive free of charge; (R-85)

Creation of permanent displays, at suitably accessible teachers' centres, of educational books and materials for use in the classroom; (R-86)

Strengthening of the supervisory and in-service training services so as to maintain much closer links between serving teachers and the administration and to bring more frequent help and professional stimulation to the teacher in the classroom; (R-87)

The holding of regular conferences and courses at local, district and national level. A modest target for the scale of provision would be to enable every serving teacher to attend a major professional meeting of this kind every three years. (R-88)

More extensive involvement of teachers in curriculum development and other professional work at both national and local level. (R-89)

FUTURE DEMAND FOR AND SUPPLY OF PRIMARY TEACHERS

6.25 The educational and professional background of the teaching force in 1976 is unsatisfactory. As Table 6.1 shows, of the 3 921 teachers in service, 38 percent had no professional training. Among those counted as "trained", 56 percent had only a primary education before training, and among untrained teachers, 81% had completed no more than Standard 7. Although the proportion of trained teachers grew in the late 1960s and early 1970s, recent

TABLE 6.1

Educational and Professional Qualifications of the Primary Teaching Force, 1976

BASIC EDUCATION	TRAINED TEACHERS			UNTRAINED TEACHERS		TOTAL	
Level completed	number	percent	type of training	number	percent	number	percent
Standard 7	1 365	56	see Note 1	1 204	81	2 569	66
Junior Certificate	925	38	see Notw 2	219	15	1 144	29
School Certificate or Matric	70	3	see Note 3	56	4	126	3
Degree	74	3	see Note 4	8	1	82	2
TOTAL	2 434	100		1 487	100	3 921	100

Note 1: Elementary Teachers Certificate (ETC), an in-service course for untrained teachers (637 teachers); Primary Lower Certificate (PL), a now-discontinued continued course requiring only Standard 7 for entry (728 teachers).

Note 2: Elementary Teachers Certificates who have obtained the Junior Certificate but no other professional qualifications (61); Primary Lower Certificate plus Junior Certificate (165 teachers); Primary Higher Certificate (PH), a now-discontinued course requiring Junior Certificate for entry (314 teachers); Primary Teaching Certificate (PTC), the present teacher training course, requiring Junior Certificate for entry (385).

Note 3: ETC, PL or PH teachers who have completed the School Certificate, usually through private study.

Note 4: Teachers with professional certificates from other countries who have completed post-secondary diplomas or degrees.

SOURCE: Educational Statistics, 1976

rapid expansion of primary enrolment has required hiring many untrained teachers and the proportion of professionally qualified teachers was no better in 1976 than in 1968 (62 percent).

Future Demand

6.26 The size of the future primary force can be estimated by taking the projected primary school enrolment at future dates and applying to it an assumed teacher-pupil ratio. The Fourth National Development Plan 1976-81 estimates that the total enrolments will grow to over 156 000 in 1981 and that almost 5 000 teachers will then be required. Our own tentative estimates suggest that this enrolment figure could well be too low because:

(a) the assumption that repeating of Standard 7 will be kept to 15 percent is probably unrealistic, given that it is over 20 percent now; and

(b) total demand for primary places seems likely to be higher than the Plan estimates if Government adopts our proposals for abolishing primary school fees in 1980 and for the takeover by councils of unaided primary schools.

6.27 We estimate that the effects of the Commission's recommendations and Government actions will be to increase primary enrolment by at least five percent above the Plan's estimates, even as early as 1981. Our estimates (see Appendix Table A-6) assume that nearly all children will enter primary school, wastage will be even lower than the present low levels, and half the children passing through primary education will repeat one year (either at Standard 4 or in the final year) in the course of their primary schooling. If Government accepts our recommendation of a six-year primary cycle, this will reduce the number of primary teachers required (but will add to demand for junior secondary teachers, as discussed later). Very approximate estimates indicate that total primary enrolment might rise to approximately 240 000 by 1990, assuming a seven-year primary cycle. If primary school covers only six years, as we recommend, total primary enrolment might be of the order of 216 000 pupils.

6.28 Accepting that there must be many uncertainties in the situation, we would anticipate that towards the end of the 1980s Botswana will require a primary school teaching force of approximately 7 500 to 8 000, based on an enrolment of some 240 000 and a teacher-pupil ratio of around 1:30.

6.29 In future planning of education, it is just as important to know the required flow of new trained teachers into the profession as to know the future size of the teaching force. At least four elements must be taken into account in estimating the requirement for new trained teachers:

(a) The rate of growth of the school population and the assumed teacher-pupil ratio. We have seen that 3 500 to 4 000 extra teachers, in addition to the present stock of 4 000, will be needed to cater for likely enrolment growth and a slight improvement of teacher-pupil ratios from 1:32 at present to 1:30.

(b) Normal net wastage (i.e. gross wastage less returners) from the current stock of indigenous trained teachers due to retirement, resignation, death, etc. A realistic current estimate would be in the region of about 50 to 100 teachers per year, rising to perhaps 240 in future, when there may be 8 000 teachers and increased numbers will reach retirement age.

(c) "Abnormal" wastage caused by, for example, sudden return home by trained expatriate teachers. In 1976 there are some 200 trained expatriate teachers, many from Zimbabwe, who may return home after Independence there.

(d) Anticipated rate of replacement of under-qualified and unqualified teachers. Out of 1 800 current unqualified teachers, we assume 1 600 need replacement or upgrading.

6.30 In other words, Botswana must aim to build up the number of trained Batswana teachers from a present level of just over 2 000 to 8 000 and to turn out 50 or more additional teachers per year, rising eventually to 240, to account for normal wastage. Once the phase of abnormal enrolment growth is completed, and when untrained and expatriate teachers have been replaced by nationals, demand will comprise two elements only, normal school population growth of, say 3.75 percent per year, and replacement of teacher wastage of, say, 3 percent per year of the teaching force. Annual output will therefore need to be about 6 to 7 percent of the stock.

Future Supply

6.31 The sources of future supply of trained primary teachers consists of:

(a) the present stock of trained Batswana teachers, less wastage.

(b) production of new teachers through initial training courses.

(c) upgrading of untrained teachers.

6.32 Clearly anything that can be done to reduce wastage is vitally important and our suggestions about improving teacher morale are directed towards this end. However, the major effort to improve the quality of the teaching force must obviously take the form of expanded teacher training provision, both through pre-service and through in-service training.

6.33 The main constraints on the expansion of teacher output from the colleges beyond its present annual level (of about 230) are lack of buildings, lack of tutors and lack of suitable student intake. Of these three, lack of suitable student intake is by far the most serious. As regards buildings, we understand that a project application has already been submitted to expand the physical capacity of the training colleges to 300 teachers each at Lobatse, Serowe and Francistown. This will give a total enrolment of 900 and a potential annual output from 1980 onwards of 450 per year. Despite some anxieties about the possibilities of recruiting enough students at first, we endorse the decision to expand the capacity of the system. There is no doubt that the extra places are needed for pre-service as well as in-service training. Expansion of the existing colleges rather than starting new ones is the correct strategy because the present colleges are too small to provide a 'critical mass' of tutors in each department. At this stage it would be premature to consider the opening of a fourth college to train primary teachers and we advise against such a course.

6.34 A sufficient supply of tutors to staff an expansion programme is likely to be a source of more serious difficulty. The colleges are somewhat overstaffed at present, but even so we anticipate that expansion of the colleges to 900 places would require a rise in staff members from the 1976 figure of 51 to 70 based upon what we consider a desirable staffing ratio of 1:13. This does not take into account the very much larger in-service commitment that we anticipate colleges will have in future. A major effort must be made to meet the need for tutors by training Batswana at the University. While this is being done, however, the main source of tutors must continue to be expatriates, and the Commission's recommendations with regard to recruitment of expatriate secondary teachers (paragraphs 6.62 - 6.67) apply also to recruiting college tutors.

Special Measures to Meet Short-Run Teacher Demand

6.35 However, as indicated above, a more intransigent problem than buildings or tutors is that of finding students of adequate quality to enter training colleges, even at output levels of 250 teachers per year, to say nothing of 450. The pool of Form III leavers with good Junior Certificate passes is not expected to grow rapidly. Teaching is accorded low priority by secondary school students and, unfortunately, by Government as well. College principals and staffs have complained bitterly to us of the low quality of present recruits of whom, in 1976, only 27 had a second class Junior Certificate pass, 192 a third class Junior Certificate pass, and 132 had only Standard 7 education. The level of achievement and ability demonstrated by many of these recruits leaves much to be desired. Even if the performance required for a third class Junior Certificate pass remained at its present level -- and the weight of the evidence presented to us is that it is too low -- we have to question whether sufficient candidates will be readily forthcoming to fill the planned additional places in the training colleges. Many of the competing training courses that students choose in preference to teaching are also planning to take higher intakes from Junior Certificate level, with the nursing programme undertaking a substantial expansion (see Appendix Table A-13). If a major teacher in-service training programme were launched at the same time as teacher training college expansion, as the Government has been contemplating, recruitment to the regular college courses would become even more difficult, for as much as 35 percent of the regular intake to the teacher training colleges has been drawn from the ranks of untrained teachers in recent years.

6.36 Yet primary school enrolment has been growing rapidly and will probably continue to do so, with a very rapid increase in demand for teachers. It is ironic that the main expansion of the primary school system may be over by the time the candidates with secondary education become available in adequate numbers. Other countries' experience indicates that teaching will become an attractive career for nationals of the country only when the civil service has largely been localised. In Botswana's case, by the mid-1980s when the overall manpower shortage will have moderated, some School Certificate leavers may be attracted to primary teacher training and even a third class Senior Certificate pass would be much preferable as an entry level for teacher training than the third class Junior Certificate passes who enter now.

6.37 In other words the demand/supply situation in respect of primary teachers seems badly out of phase in the sense that a situation of rapidly rising demand and inadequate supply is likely to be followed by a period of much greater supply of better qualified candidates and lower demand. The danger -- and we must emphasize its potential seriousness -- is that rapid expansion of teacher training now would fill the teaching force with poorly qualified recruits who would then remain in the system for many years. The better qualified candidates who became available later would not easily be absorbed because posts would have been filled in the meantime.

National Service

6.38 Is there any alternaitve to recruiting third class Junior Certificates and unqualified primary leavers during the period of rapid expansion? One possibility that has been put to us is that teacher salaries should be drastically raised relative to those of other professions, so as to induce school leavers to enter teaching instead of alternative careers. This idea seems to us to be short-sighted. In a situation of absolute shortage of qualified manpower such as currently exists in Botswana, it would simply create a competitive 'auction', raising salaries both among existing serving teachers and other public servants. A second idea is that Government should consider drafting first and second class Junior Certificate holders into teacher training, and thence into teaching, under bond. This indicates a proper sense of urgency but we are opposed to drafting people against their will into teaching on a permanent basis, because we think such recruits will be poorly motivated and that their dissatisfaction will be reflected in a poor teaching performance in the classroom.

6.39 There is a third alternative, and it is one which the Commission urges the Government to explore. This is that Form V leavers should be required to give two years' service as primary school teachers immediately upon leaving secondary school. This would be temporary service, not a permanent commitment to teaching, and it would be designed to tide the country over the period of teacher shortage until such time as better quality recruits were available for permanent posting to teaching. It would, of course, have other advantages, apart from filling the teacher gap, for not all the Form V leavers would be needed for primary school teaching, and other national projects would also benefit. This scheme would open up new perspectives on the problems of people in the rural areas of the country to a rather privileged group of young people destined to fill leadership positions in the country's future development. Moreover, the temporary interruption of classroom studies might be expected to produce a maturity and motivation among these young people that would cause them to perform better subsequently in both study and work, whether at the University or elsewhere.

6.40 There are a number of ways in which national service could be organised. The Commission feels that two years of national service would be the best duration, for it gives the servicemen sufficient time to learn his or her task and make a serious contribution. Those national servicemen required for primary teaching could receive a short 'crash course' before the beginning of the January primary school term, returning to college in their first or second vacation for perhaps three weeks to consolidate their basic teaching skills. It would also be necessary to establish a corps of teacher advisers to assist these new teachers and supervise them closely.

6.41 If present arrangements for the academic year at the University remain in force, then those going on to University would do so two years later than if there had been no national service. As now, they would wait nine months before going into the University, but it might be possible to use this period for remedial courses for those who needed them, in mathematics and science for example. Other alternatives, however, might be envisaged which would reduce this nine month interval. One is that the first year course could start in January, three months later than at present, but then be 'telescoped' by using the long vacation. Under this system the national service scheme would be using the 'wasted' school-university break, and two years' national service would be gained at the expense of only one years' delay in university graduation. Another possibility is that courses might follow their existing rhythm, but the University academic year might itself start in January. In this case qualified manpower would be produced fifteen months later than at present.

6.42 We do not seek to minimize or conceal the problems that would arise temporarily for all those courses and occupations that normally take Form V leavers, whether University or elsewhere. In the year after the scheme was introduced they would have a temporary interruption of admission direct from Form V. This might be made partially good by admitting Form V level students who did not come straight from school. Additionally or alternatively admissions to other courses might be stepped up in order to use spare capacity -- for example, courses with Junior Certificate entry or in-service training. The intermission could also be put to productive use for curriculum development and course design, especially for preparing the part-time and evening courses whose introduction we so strongly advocate. The year or years of intermission could in fact prove extremely fruitful in allowing institutions to rethink their philosophy and operations in the light of the new education philosophy advanced in this Report, and in releasing teaching staff for practical experience in the occupations for which they prepare students. Although some disruption would be inevitable, it could be minimized with careful planning and we consider that the price would be a small one to pay for a significant improvement in the quality of teaching in primary schools, not just in the short term but also -- by 'buying time' until good quality permanent recruits could be found as educational supply expands - over the longer run future also.

6.43 If this scheme were adopted we envisage the likelihood that 1 500 - 2 500 form V leavers could be available for staffing the primary schools at any one time, though fewer than this would be needed. This scheme would obviate the necessity of taking on untrained Standard 7 leavers to fill the gap, or of dropping standards of admission to training courses to an unacceptable level. Our projections suggest that the number of national service personnel could be scaled down considerably by the late 1980s and it would then be time for considering whether the national service scheme should continue in other fields of service or whether it should be phased out.

Experience Prior to Teacher Training

6.44 One other factor will affect the demand and supply of primary school teachers. We believe that all teacher training college entrants should in future serve a probationary period of one year in the schools before entry to the training college. There are three advantages to this proposal. The first is that prospective teachers and the Unified Teaching Service both have the chance of deciding on the appropriateness of teaching as a career for the person concerned, and unsuitable candidates will not be admitted to college. Second, the period of teacher training can be used very much more constructively if trainees already have some experience in the schools and of the practical problems involved in teaching. The training will be much less abstract and unreal.

Third, less time will need to be spent on practice teaching during the training period. The direct implication of this proposal is that some 500 to 600 places need to be kept in the system for probationary teachers. Out of 500 - 600 candidates, about 450 will be admitted each year to the colleges. We discuss this proposal in more detail in the section on teacher training.

6.45 We make this proposal for the probationary year particularly in the context of primary teacher training. We would observe, however, that the advantages that we have set out in the previous paragraph apply with equal force to other types of post-Junior Certificate full-time training, both for the positive benefits it would bring and also to keep teacher training schemes in line with training for other professions.

6.46 Our proposals are deliberately designed to prevent the flooding of the primary teaching profession with sub-standard material at a time when demand for teachers exceeds supply. They would make it possible to replace quite rapidly a high proportion of the untrained teachers in the system, by an approach which is basically an alternative to the mass upgrading scheme for untrained teachers (most with only a Standard 7 background) envisaged in the Fourth National Development Plan. The majority of untrained teachers would not have their contracts renewed, but about 400 of the better qualified would fill the vacant first year training college places in the year the scheme was introduced. A small and select upgrading scheme should be launched to help some of the remainder to reach Elementary Teachers' Certificate status, and a few unqualified teachers with a particularly long and good record of service would be retained until retirement. Table 6.2 presents an illustrative calculation of demand for and supply of primary teachers through 1985, indicating the effects of our national service and probationary year proposals.

6.47 *The Commission recommends that:*

Expansion of the teacher training college system should be through the expansion of the existing three colleges in accordance with present policy, and that no additional colleges are needed at the present time. (R-90)

Botswana should establish a two year national service requirement for all Form V leavers, the service period to be spent in primary school teaching or other activities of service to the nation. (R-91)

A probationary year of teaching should be instituted for all teacher training candidates prior to entry into the primary teacher training colleges. In the year in which the probationary year of teaching is introduced teacher training college first year places should be filled by the best of the serving unqualified teachers. (R-92)

TABLE 6.2

Primary Teacher Demand and Supply in Botswana, 1976-1985

An Illustrative Calculation Assuming National Service and Probationary Year Proposals Accepted

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
1. Projected enrolments[a]	125 588	135 621	144 030	151 555	158 462	164 143	168 414	178 030	187 421	198 301
2. Teacher-Pupil ratio	32	32	32	32	32	31	30	30	30	30
3. Total teacher demand (1 ÷ 2)	3 925	4 238	4 500	4 736	4 952	5 295	5 614	5 934	6 247	6 610
4. Trained Batswana teacher stock of previous year	2 231	2 434	2 586	2 801	3 033	3 302	3 609	3 907	4 196	4 476
5. Deduct wastage during previous year (3% of line 4)	18	73	78	84	91	99	108	117	126	134
6. Add new second year output from TTCs[b]	221	225	293	316	60	406	406	406	406	406
7. Total trained teacher supply (4 minus 5 plus 6)	2 434	2 586	2 801	3 033	3 302	3 609	3 907	4 196	4 476	4 748
8. Other teachers required (3 minus 7)	1 491	1 652	1 699	1 703	1 650	1 686	1 707	1 738	1 771	1 862
9. Of whom National Servicemen in teaching	---	---	---	500	1 000	1 086	1 107	1 138	1 171	1 262
10. Probationary teachers[c]	---	---	---	550	550	550	550	550	550	550
11. Others (8 minus 9 and 10)[d]	1 491	1 652	1 699	653	100	50	50	50	50	50

Notes:
- a. Enrolments as projected in Appendix Table A-6, assuming a seven-year primary cycle, rounded to the nearest thousand.
- b. Output calculated at the rate of 95% of previous years'second-year TTC enrolment, assuming first year intake to TTC reaches capacity of 450 per year in 1979, and 5% wastage between years 1 and 2.
- c. In 1979 intake to TTC is from untrained teachers while Junior Certificate leavers spend one probationary year in the field before entry.
- d. Demand for National Service teachers will decline after 1985.
- e. From 1981 onwards a residual of long-serving untrained teachers, roughly estimated as 50 teachers, remains in the teaching service. Many of these will have been upgraded in service.

SOURCE: Ministry of Finance and Development Planning for National Commission on Education

FUTURE DEMAND FOR AND SUPPLY OF SECONDARY TEACHERS

Current Situation and Trends

6.48 Appendix Table A-11 shows the composition of the public sector secondary teaching force in 1976 by nationality, terms of appointment and qualification. The most discouraging features of the situation revealed by these tables are the scarcity of Batswana teachers and the small proportion of the total staff holding permanent posts. These characteristics of the secondary teaching force reflect the late development of secondary and higher education in Botswana, and the much better promotion prospects that have been available to Batswana in other professions.

6.49 More serious than either of these defects, but in part reflecting them, is the lack of experienced teachers in the secondary schools and the very rapid turnover among serving teachers. We have already noted our finding that about one-third of the Batswana teachers at this level leave their posts in an average year, and the figure is as high as forty two percent of the expatriates per year, during the five year period studied. Most of the foreign teachers are on short term contract or are serving under volunteer schemes for limited periods. The assessment survey (Annex 1) which was conducted for the Commission produced additional evidence of the instability of the teaching staff in secondary schools. Seventy three percent of secondary school teachers reported that they had been teaching in their present post for two years or less.

6.50 The continual turnover of inexperienced teachers has many damaging effects, quite apart from the difficulty of giving secondary education in Botswana a genuinely national identity. In the first place children are being exposed during their short time in school to a succession of different teachers with different methods and approach, different accents and so on. This is a severe impediment to learning. Moreover, the quality of institutional life is greatly impaired when the continuity is provided by the students rather than the staff. A second major problem is the enormous amount of energy and resources that have to be expended on recruitment by the Ministry and school heads, as well as by agencies which employ foreign teachers. Third, the effect of having inexperienced teachers prevents more economical staffing in the schools because new teachers need so much more time to prepare their lessons and cannot be expected to carry such a heavy teaching load. Finally, we would mention the loss of quality of experience for new Batswana teachers when, instead of working with more experienced teachers who can give them helpful advice, they find themselves alongside an overseas volunteer with rather less background in teaching than they have themselves.

6.51 The Commission's survey indicates that the problem of staff turnover is felt much more acutely in mathematics, science and the applied subjects than in other fields. There is both a more serious shortage of Batswana teachers in these fields and a higher rate of turnover. The percentage of teachers with less than three years experience in their present school was 69 for teachers of English, 73 for mathematics and 77 for science.

Future Demand

6.52 The Commission agrees with the estimate in the Fourth National Development Plan of a total requirement of about 630 teachers for the public secondary system in 1981, bearing in mind that our proposals for restructuring secondary education can only begin to take effect at that time, and will not initially affect the total size of the secondary system. The implication of the Plan estimates, plus other factors, is that Botswana must recruit nearly 300 local teachers during the period 1976-1981 before the number of expatriate teachers can be substantially reduced. Some 170 new secondary teachers will be needed to provide for increased enrolment and additional classes in the new secondary schools. The Commission believes that at least another 50 teachers will be needed to replace wastage from the Batswana teaching force (assuming a ten percent wastage rate rather than the three percent used in the Plan). In addition there are about 80 teachers from Zimbabwe who can be expected to return to their homes when a new Constitution takes effect there.

6.53 The overall need for about 300 additional teachers is about the same as projected supply from local sources. The implications of these figures are that the demand for expatriate teachers (from countries other than Zimbabwe) for secondary schools will hardly be reduced at all in the short run. We believe that expatriate teachers should be regarded as residual in the sense that they should be recruited to fill positions for which trained Batswana are not yet available, mainly in mathematics, science and practical subjects. They will not be residual in the sense of 'dispensable'. We foresee that Botswana will need expatriate teachers in some fields for at least ten or fifteen years. This fact should be squarely faced and policy should be directed towards ensuring that the country obtains the best possible recruits.

6.54 The Plan's calculations are based on a total of 378 secondary classes and a teacher-class ratio of 1.67:1. In our view the total number of classes, which is based on a standstill in secondary expansion from 1980, may prove rather too low; but we also consider the projected teacher-pupil ratio of 1:20 to be too generous in Botswana's circumstances and we consider the present ratio (1:22) as good as can be afforded. Indeed even this ratio is beyond Botswana's long term capacity to sustain and can only be justified while such large numbers of inexperienced new recruits are entering teaching each year. When the staffing situation becomes more stable and the level of experience rises, we believe that school staffing should be based on the following:

	Junior secondary	Senior secondary
Pupils per teacher	28	23
Class size	40	35
Teachers per class	1.4	1.5
Average teaching load (periods per 40-period week)	31	31

6.55 Looking beyond 1981 we envisage the continuation of demand at a high level, most of the new teachers in that period being channelled into the presently unaided schools, which under the strategy we have proposed, Government would be assisting. With the rather rapid expansion of junior secondary education (grades 7, 8 and 9) during the 1980s, the emphasis will be on non-graduate teachers needed in the junior secondary schools.

In the late 1980s there might be perhaps 5 000 pupils at junior secondary level, and 12 000 to 15 000 at senior secondary level. Given the above target teacher pupil ratios, overall teacher demand at that time could therefore be in the region of 2 000 junior secondary teachers and 600-700 senior secondary teachers.

6.56 *The Commission recommends that overall secondary teaching ratios be held at their present level for the time being, but that when the staffing position becomes more stable the ratio should be 1:28 at junior secondary level and 1:23 at senior secondary level. (R-93)*

6.57 The University College of Botswana will continue to be a major source of trained Batswana secondary teachers. Both the four year degree programme with Concurrent Certificate in Education (CCE) and the present three year Teachers' Certificate course should, in our opinion, be restructured and if our proposal for universal junior secondary education is accepted, there will also be a need to train substantial numbers of junior secondary teachers. Restructuring of the degree courses which is discussed further below (paragraph 6.87) will not affect throughput and supply. The changes we propose for the Teachers' Certificate course (paragraphs 6.88 - 6.89) involve shortening the course in the medium long term from the present three years to two, and will thus increase annual output by 50 percent for the same total number of students enrolled.

6.58 Under the Fourth National Development Plan it is hoped to raise Teachers' Certificate output from 18 in 1976 to 60 in 1980, and to increase degree (Concurrent Certificate in Education) output from 24 to 39 over the same period. These are probably the maximum feasible increases under the circumstances, especially in view of the overall scarcity of candidates with good Cambridge passes and the very small proportion of well-qualified candidates who choose to enter education courses. An analysis of entry standards of those embarking on the Teachers' Certificate course shows a perceptible decline in entry qualifications in the three years 1973/74 to 1975/76 and there may be difficulty in 1977 in finding sufficient well-qualified entrants to double intake as planned.

6.59 For the same reason as we have given in the case of primary teachers the solution to the shortage of secondary teachers is not "more pay". Salaries for all new graduates are already extremely generous when compared with average incomes in Botswana, and the position for new graduate teachers has recently become even more favourable with the introduction of differential salaries for graduates in science teaching. An Arts graduate with the Concurrent Certificate in Education now receives a salary that is two scale notches, and the Science graduate three scale notches, above the position of a degree holder without the CCE. Although the salary differential offered to science degree holders has been criticized, we feel that it serves to emphasize the relative scarcities of such personnel in Botswana and that it should be retained for the time being.

6.60 Partly as a result of these changes, however, the position of the non-degree, Teachers' Certificate holders has become unfavourable: not in absolute terms but in comparison with graduate teachers. When special starting salaries were introduced for graduates with the Concurrent Certificate in Education, no comparable treatment was provided for the Teachers' Certificate holders and as a result the gap between the two categories of teachers has widened. The starting salary for those entering teaching with a degree, who have studied only one year more, is now some P1 000-1 200 (48-55 percent) higher than the holder of the Teachers' Certificate. Although the degree student has studied an additional year and entered university with a better quality school certificate, we do not think that such a wide differential for teachers doing basically the same job can be justified. We note that the Teachers' Certificate trainee takes the same kind and number of courses in education during three years as the graduate does in four, and that the Teachers' Certificate candidates actually receive more practice teaching during their course of study than their counterparts earning the degree and Concurrent Certificate.

6.61 *The Commission recommends that the relationship between the pay scales for qualified graduate teachers and holders of the Teachers' Certificate should be reviewed. (R-94)*

Recruitment of Expatriate Teachers

6.62 We would like to see a much more effective effort mounted to recruit high quality expatriate teachers, since Botswana will have to rely for some time on external sources of supply for experienced teachers and for specialist teachers of many subjects.

6.63 The Commission draws attention to the urgency of reducing turnover of expatriate teachers. This is a much less costly yet educationally more effective means of boosting supply than constant recruitment of new short contract teachers. It would have highly beneficial effects on the quality of education in the secondary schools. We have heard that a major cause of wastage at present is uncertainty among expatriate staff over whether their contracts will be renewed. We also understand that the anonymity of present staffing arrangements militates against high morale amongst expatriate teachers, and we think it essential to provide a contact point in the Ministry for expatriate teachers.

6.64 A particular point of relevance to expatriate tutors in the teacher training colleges is the need to familiarise themselves with teaching conditions in Botswana's primary schools before they embark on their teacher training duties. A period of observation should be arranged for this category of expatriate staff at the beginning of their first contracts.

6.65 On the general question of recruitment sources and procedures,

The Commission recommends that:

A wider range of countries from the English-speaking world should be approached for help with teacher supply.

Botswana should appoint recruitment officers in its major overseas posts.

The present regulation that no teacher new to Botswana should be appointed above the eighth point of the graduate scale should be abolished forthwith, since it acts as a direct deterrent to the more senior and experienced teachers Botswana needs most to attract.

Teachers should normally be recruited to start work in January at the start of the academic year, and even when this is not possible their contracts should be written to extend to the end of Botswana's school year. Leave should be taken in vacation periods only.

The teacher recruitment machinery must be reorganised to cut out the delays which have been common in recent years. (R-95)

6.66 In order to lengthen the average stay of expatriate teachers,

The Commission recommends that:

Longer contracts should be offered on initial recruitment.

Review of contract should be arranged after a new recruit has served in Botswana for nine to twelve months and been found satisfactory.

Every expatriate teacher should be told in writing at least nine months prior to the termination of his contract whether his or her services will be further required.

There should be a specially assigned and identifiable senior personnel officer in the Unified Teaching Service who would be the point of contact for expatriate staff serving in the schools and teacher training colleges, on matters affecting their terms of service.

The terminal gratuity should be more sharply graduated to give a greater incentive to the teacher renewing his contract. Given the cost of recruitment, we think this could actually save Botswana money.

The balance of recruitment should be moved away from volunteer teachers in the direction of more experienced contract teachers. (It should be borne in mind, however, that the services of volunteer teachers would be very much welcomed by many of the unaided secondary schools). (R-96)

6.67 In respect of newly recruited expatriate training college tutors

The Commission recommends that they spend two months at the beginning of their contracts in observation of conditions of teaching in Botswana's primary schools. (R-97).

THE TEACHER TRAINING SYSTEM

6.68 Traditionally teacher training in Botswana has been a rather isolated undertaking, confined to two or three years' of pre-service training, and somewhat divorced from the work of the schools and from the various support services being made available to teachers. The Commission would like to see this situation changed over the coming years so that teacher training institutions play a more central role, in cooperation with other agencies, in the ongoing improvement of the education system.

6.69 In the first place this will involve the provision of a more comprehensive range of teacher training programmes, making available to serving teachers opportunities for professional development over the whole course of their careers. Second, it implies that training activity in teacher training institutions must in future be more closely linked with the acquisition of practical experience in the schools so that, in the development of the teacher, supervised learning on the job goes hand in hand with classroom studies in colleges or university. Third, teacher training must be linked more effectively with work in curriculum development and research, experimentation with new methods and materials in the schools, and provision of professional support services to teachers of the kind described in paragraphs 6.20 - 6.24. Finally, closer cooperation and consultation between all the various parties concerned with the training and professional development of teachers -- the Ministry of Education and the various sections within it concerned with in-service work and curriculum development, the teacher training colleges, the Unified Teaching Service, the University -- must be greatly strengthened. The National Council on Teacher Education should play an effective role in this respect.

6.70 If the teacher training colleges and the Faculty of Education of the University are to develop a capacity to respond to these challenges they will require higher calibre staff for their pre-service training activities, more personnel for liaison with the schools and to give professional help to new serving teachers, and improved facilities and equitment. Such resources can only be provided gradually, but the important thing is that the direction of development should be clear. The institutions concerned must be encouraged to see their role as professional resource centres. This implies that students within the colleges be given greater responsibility for their work and behaviour. It also implies a measure of professional autonomy for the institutions within the framework of a national policy for teacher education.

Pre-Service Training of Primary Teachers

6.71 Organisation. - As already indicated, the Commission supports the planned approach of expanding the three existing colleges at Francistown, Lobatse and Serowe to bring each up to a size of about 300 students.

6.72 The primary teachers course should continue to be of two years' duration for the present with entry at Junior Certificate level, rising to Senior Certificate level in the 1980s as soon as there are sufficient senior certificate leavers to permit intake at this level. But instead of entering college direct from secondary school, students wishing to become teachers should first serve for a year as probationary teachers in the primary schools under the supervision of teacher advisers (see paragraph 6.44). Towards the end of this period the probationary teachers would be given the option of confirming their application for a college training place or of resigning. Admission would depend on a satisfactory report from the school where they had been working

6.73 The Commission considers that such a scheme of entry to the colleges should result in the recruitment of much better material into the teaching profession. Those who are unsuited to teaching can be identified before the expense of training them is incurred, and students who are already familiar with the work in primary schools should be able to gain much more value from their period of training in the college, and should contribute much more themselves to the training process. Such a scheme will remove the frequently emphasized need to lengthen the training period in the college from two years to three. The Commission understands the professional concern for quality that lies behind such suggestions, but believes that Botswana cannot afford the financial burden of a three year course nor the one year loss of teacher output that would occur. Moreover we believe that our proposal that students should enter college after an initial one year supervised work in primary schools would actually prove to be a more effective way to train teachers.

6.74 As already indicated (paragraph 6.46), during the year in which probationary teaching for Junior Certificate leavers who apply for teacher training is introduced, the colleges should open their doors to the best of the present untrained teachers. This opportunity can be made available to 15 - 20 percent of the untrained teacher force, and evidence submitted to us from the colleges suggest that sufficient candidates of ability should be forthcoming.

6.75 In admitting students to probationary teaching an effort should be made as a matter of deliberate policy to ensure proper representation of all areas of Botswana. In view of the difficult staffing position in some rural areas, we suggest that quotas be established for geographical areas of special need, and that if necessary modest concessions be made in entry requirements for candidates from those areas. Students admitted to teacher training on concessionary terms would have an obligation to serve the five years of their bond in their home area, if so required by the Unified Teaching Service.

6.76 Curriculum. - Our view regarding the curriculum of the training college course, is that, in this area as in the primary and secondary schools, the style and approach of the curriculum is as important as its content. If one major objective of Botswana's education system is to develop citizens who will understand and honour the national principles, and if the education system is seen as a major instrument for strengthening adherence to the national philosophy, then it is quite essential that teachers themselves are imbued with the spirit of this philosophy. Democracy development, self-reliance and unity must characterise the life of the college itself and the methods of teaching and learning used there. At present we find the colleges to be somewhat authoritarian in their approach to students, with more emphasis on discipline than self-discipline, and on conforming with instructions than on personal responsibility. Many of the students are young adults who have already earned their living as untrained teachers, and if our proposals are adopted the entire student body of the colleges will consist of such people. They must be treated as adults and as young professionals who are about to be entrusted with the care and nurture of the nation's children.

6.77 In the college lecture room the same principles that are being held up to the students as desirable in primary school classrooms must themselves be evident. For students will absorb the principles of good teaching, continuous assessment and the maintenance of pupil records, remedial teaching, classroom organisation, the use of visual aids, punctuality, and care for the individual wellbeing of each pupil, from the behaviour of tutors in the training colleges in these respects. These are all things which must be practised as much as taught. The specific proposal made to us in one submission that one day in the college week should be organised not on traditional subject lines but on the same integrated basis as is found in the progressive primary school is an example of the principle we are enunciating, and experimentation with this approach should be undertaken.

6.78 The content of the present curriculum is divided into foundation studies and curriculum studies. Foundation studies comprise both (i) the strengthening of the teacher's own basic education and (ii) the study of educational theory; while the curriculum studies are concerned with (iii) the method of teaching the primary school curriculum. We believe that all these three components of the present curriculum must have their place in any future curriculum that may be devised.

6.79 The education of the teacher in the subjects he or she will teach should concentrate on improving the proficiency of the student in language and number skills, that is to say in Setswana, English and mathematics. The aim should be to get each student up to the present level of a first class or good second class Junior Certificate pass in these subjects. It will be tempting for colleges to add all kinds of other subjects for the general education of teachers, but we urge that the temptation be resisted and that the concentration be on these basic skills. It is of course both possible and desirable to develop these skills through the use of subject matter and examples drawn from social science or science; but we reiterate that the aim is to give teachers a command of the skills and not to give them broad subject knowledge.

6.80 The study of education should be pragmatic in its orientation, and should be carried out against the background of the trainees experience gained in the field. Rather than study the theoretical foundations of education in terms of sociology, philospohy and psychology, the student teachers would find it more useful to study the actual situation in Botswana society, among Batswana children and in Botswana schools. What are the characteristics of homes in Botswana? What kinds social and educational needs did teacher trainees observe in their pupils during their year of probationary teaching? What are the implications of the national principles for Botswana's schools? What were the main learning difficulties of the Motswana child that the trainee encountered? How can cooperation with the home best be arranged? What kinds of social relationships are there between pupils, between teachers, and between teachers and pupils in a school? How can discipline best be maintained in the classroom? By discussing issues such as these, the students' study of the sociology of education and of child psychology can help them to interpret and enrich their own experience; likewise, they can use their practical experience to elucidate theory.

6.81 In addition to these topics teacher trainees should be introduced to techniques of classroom organisation and management that they will utilise while teaching. They should also study, very generally, the way the education system works in Botswana and the place of the primary school within it. Students should be made to understand the administrative procedures and regulations that directly affect the teacher, such as:

(a) The keeping of school records and school registers;

(b) Compiling of returns to Headquarters;

(c) Drawing up class time tables and the creative use of time to permit, for example, small group instruction;

(d) Techniques of evaluating student achievement.

6.82 In the area of 'curriculum studies', or approaches to teaching the present school curriculum, one must be extremely selective. It is quite impossible for every teacher to be familiar with every unit of the primary school curriculum since the student will have only the equivalent of a few months work, whereas the primary curriculum covers seven years. What is needed here is, first, for every teacher to have a good grounding in the skills of teaching reading, writing and arithmetic. Second, with respect to the subject content of the primary school curriculum, the colleges should not aim to give the student detailed familiarity with the content, but rather to give him or her the ability to use the syllabus, the materials and teacher guides. Trainees should receive instruction and guided practice in the basic principles of preparing and presenting the material for a lesson in any subject. Thus when the teachers are faced in school with the need to teach a curriculum unit they have not seen before, they should be able, for example, to identify the basic points to be covered and to organise them appropriately. They should be in the habit of thinking what visual aids they could make or use in connection with the lesson. In other words, the student should try to acquire familiarity with the nature of the curriculum and the nature of materials used in primary schools rather than with the totality of its content.

6.83 On the question of specialisation in the initial training course, the Commission's standpoint is that every newly trained primary school teacher should be equipped to teach any primary school class. We support in principle the recent decision to end the system of training teachers for different levels of the primary school. We believe that the previous differentiated system militated against needed flexibility in the posting of teachers and might appear to prejudice the chances of some teachers in obtaining promotion to posts of greater responsibility. So long as this basic requirement of ability to teach any grade is met, we see no reason why students should not concentrate on problems of teaching particular age groups, by devoting say a quarter of their time on curriculum studies to infant, middle or senior primary classes. This concentration would in no sense constitute a specialist qualifications nor would it remove the obligation on the teacher to take any class in the primary school as needed. We refer again later in our Report (paragraph 6.101) to opportunities to obtain specialist qualifications through in-service training.

6.84 *The Commission recommends that:*

The primary teacher training course should continue to be of two years duration, but entrants should serve for a first probationary year in schools before entering college. (R-98)

All areas of Botswana should be properly represented in selecting students for teacher training. Quotas should be established for areas of special need, and if necessary, concessionary entry requirements applied for students from those areas. Students admitted on concessionary terms would be under obligation to serve their period of bonded service in their home areas. (R-3)

The curriculum of the training colleges should be more firmly oriented in both style and content towards the school system. There should be emphasis on developing in the teacher professional skills for use in the classroom, and on a strong grounding in Setswana, English and mathematics. (R-99)

Teachers must be trained to be able to teach any primary class. Subject to this condition, some limited specialisation in the problems of teaching particular age groups could be valuable. (R-100)

Pre- Service Training of Secondary Teachers

6.85 The Role of the University. -- For the present the training of secondary teachers at both Teachers' Certificate and degree levels takes place in the Unviersity College of Botswana. There are a number of unsatisfactory aspects of present arrangements which we believe should be rectified. In the first place some elaboration of the relationship between the Teachers' Certificate and the degree course is necessary. The present position whereby the two groups pursue many of the same professional courses, but are taught separately, appears to us to be wasteful and anomalous, particularly in view of the similarity of their actual work and responsibilities in the secondary schools after graduation.

6.86 A second cause of concern is the limited amount of time available, with the current structure of courses, for education studies. The Faculty of Education requires the maximum cooperation of other faculties, and also an increased time allocation for education courses. The responsibility of the whole University for the adequate preparation of trained secondary teachers cannot be too strongly stressed. This is not the exclusive task of the Faculty of Education. The Commission believes that this has not been sufficiently recognised. The demands of different faculties for sufficient time to give students a basic grounding in their disciplines are understandable. However, the University, in consultation with the Ministry of Education, must decide collectively what should be the basic requirement for a certificate or graduate teacher, and must then take the initiative in devising an integrated course which will supply these requirements. A re-examination of the structure and content of the courses at the University is thus clearly necessary, and will in any case become inevitable if the new 6-3-3. structure is adopted.

6.87 As regards the future of the four-year degree course with concurrent certificate, the Commission's view is that a more integrated course leading to an education degree (without a separate concurrent certificate) seems desirable. This would provide a much needed increase in the time allocation for education, which at present constitutes only one sixth of the courses. We think that up to 25% of the course should be devoted to education; but not more, since the vital importance of an adequate disciplinary grounding for secondary teachers is recognised. The need for university-wide commitment to these courses would be important. The present arrangements that permit older untrained graduates to add a concurrent certificate in education or postgraduate certificate through part-time study should be continued.

6.88 A New Kind of Junior Secondary Teacher. - As far as the certified non-graduate secondary teacher is concerned, we foresee the need in future for a different kind of teacher for a widely accessible junior secondary school. Instead of a highly selected student entry as at present, the junior secondary schools will admit students of a wide range of abilities, posing pedagogical problems different from those now being encountered in the present selective secondary schools. We propose that as soon as possible a new post-secondary course should be launched to prepare teachers for this level of teaching. It should last for two years and lead to the Botswana Teachers' Certificate (BTC). This should replace the present three-year Teachers' Certificate course. The University should continue and expand its Diploma in Education course for qualified teachers who, after an appropriate period of service, elect to take specialist courses in the teaching of a particular subject or in a particular specialist branch of educational work at a more advanced level. This diploma should be offered on a part-time as well as a full-time basis.

6.89 Initially the new two year Botswana Teachers' Certificate course might be launched at the university, possibily, allowing time for course preparation and taking account of students' national service obligations, in the early 1980s. But bearing in mind the different teaching styles implied by the junior secondary school courses, and also the fact that the numbers required will be beyond the physical capacity of the University to handle, we suggest that these new BTC courses should be transferred as soon as possible to a training college. In addition to other advantages this will be considerably cheaper than the University and it will prepare the way for a longer term situation in which entry to all college courses, even those for primary teachers will be mainly post senior secondary school. Government planning should be flexible in relation to the precise date that the courses should be moved from the University and the rate at which they should be built up. In conclusion we must state our view that teachers at the junior secondary level should be versatile and should be trained to teach more than one subject on the school curriculum.

6.90 Teachers of Practical Subjects. - The need to reorient second level education toward practical studies and training has been stressed by the Commission. All the suggestions for making education more practical will fail, however, if Botswana does not take quick and decisive steps to train the required teachers of practical subjects. At present no facilities for training practical teachers or instructors exist in the country, and the few existing teachers are non-Batswana. It is therefore clear to the Commission that for the immediate period Botswana will have to introduce a vigorous programme of recruitment from foreign countries supplemented by introduction of short-duration training for those few Batswana who have already acquired the necessary skill and could be attracted to teach.

6.91 For the medium and long run, however, the Commission strongly urges that the Ministry of Education initiate training provision within Botswana and suggests two possible models. The first would be an 'end-on' one year teaching course for persons who have obtained a vocational qualification post-School Certificate and possibly have one year's practical experience. The kind of people we have in mind would be those with say, a diploma from Botswana Agricultural College or a technical certificate from Swaziland -- or qualifications of a similar level in Domestic Science or Commerce -- who after a year's practical work would take one year full time or two year part-time teachers' course at the University under the joint supervision of the Faculty of Education and the appropriate vocational training institutions. A second alternative, way of training practical teachers would be to institute longer 'concurrent' training courses combining vocational and teacher training. These might be held for industrial arts teachers at the National Centre for Vocational Training (NCVT) and the Brigade Development Centre (BRIDEC); for commercial subject teachers at the Botswana Training Centre (BTC); and for Agricultural and Domestic Science Teachers at the Botswana Agricultural College (BAC). The concurrent education courses could be provided either at the training institutions or in the Faculty of Education of the University. Numbers required will be small at first, with only 21 schools presently planned for the public system in 1981, but demand will rapidly escalate if our proposal for a practical element in all courses at junior and senior level is accepted. Planning for these technical teacher training courses shoud start immediately.

6.92 Technical Instructors. - As regards instructors for the brigades and NCVT, Botswana will have to depend heavily upon expatriate vocational and practical instructors in the immediate future. It is of great importance however to begin now to train a cadre of such instructors. Annex 3 presents ideas on how instructors for the NCVT and for practical subjects at the secondary level can be trained In conjunction with such training, the schemes of service for instructors must be modified to increase the likelihood of retaining them as instructors.

6.93 *The Commission recommends that:*

The structure of courses at the University to prepare graduate secondary school teachers should be changed. Instead of a degree in arts or science with a concurrent certificate in education, the University should offer an education degree. (R-101)

The structure of the degree level courses for secondary teachers must be agreed at University level, and should have the full commitment both of the Faculty of Education and of other faculties. (R-102)

The current three year Teachers' Certificate course should be phased out and replaced by a two year Botswana Teachers' Certificate course to prepare junior secondary teachers with admission after senior secondary school. This Botswana Teachers' Certificate course should be introduced as soon as possible and when feasible transferred from the University to a training college. (R-103)

The Diploma in Education should continue to be awarded to those completing a one year specialist course, and should remain in the University. (R-104)

The Ministry of Education should establish teacher training courses for practical instructors, utilizing the resources *of the Faculty of Education and the relevant training institutions, (NCVT, BAC, BTC) jointly. Teacher training might either be 'end-on' to technical training or concurrent with it. (R-105)*

High priority should be given to the training of vocational and practical instructors, and their schemes of service should be adjusted so as to improve the possibilities of attracting and retaining instructors. (R-106)

In-Service Training

6.94 The Commission views in-service training of teachers and other professionals in education as an aspect of the general philosophy set forth throughout this Report, of eliminating the discontinuities between formal and out-of-school learning and between education and work. In-service training is not merely a stop-gap means of upgrading untrained and underqualified teachers but rather a continuing means of strengthening and renewing the education system through the development of teachers' competence and sense of professional commitment.

6.95 Several kinds of in-service training are needed in a fully comprehensive system of teacher education. There is first in-service training for purposes of professional development in the sense of upgrading teachers from one basic qualification level to the next. Second, there are specialist courses for teachers at any level. Third, there are shorter refresher courses, or courses to introduce teachers to specific new techniques or to new curricula.

6.96 It should be noted that some of these types of in-service training will take place in colleges or at the University on a long-term residential basis. Others will take place at field centres and be of short duration. In some cases, such as the upgrading courses, the course will consist of supervised work by teachers in their schools and by correspondence from their homes, and in these instances field supervision of in-service training plays an important role. Botswana must strengthen its capacity for in-service training in all three locations -- in the colleges and university, at field centres, and in the actual schools where teachers are working.

6.97 As regards upgrading, we regard it as a cardinal principle that a career progression ladder should exist for able and ambitious teachers who wish to improve their professional competence and status. There are more gaps than rungs in Botswana's career ladder at the present time. For example, since the 'Francistown upgrading course' was discontinued in the early 1970s it has not been possible for untrained teachers to become qualified except by gaining admission to full-time training colleges. There is no avenue for Elementary Teachers' Certificate teachers to obtain Primary Teacher Certificate status. A Primary Teacher Certificate teacher cannot obtain any further specialist qualification enabling him or her to continue in primary teaching with enhanced status.

6.98 We should make it clear that we are not advocating a kind of qualification escalation among teachers who would take courses in large numbers simply to draw more pay without necessarily increasing their competence. Some previous courses were perhaps open to criticism on these grounds. We believe it is necessary to lay down three principles which should govern the mounting of courses of this type. The first is that the courses must have a content relevant to improved professional competence and performance. We are not in favour of a system whereby acquisition of academic qualifications (e.g. Junior Certificate or Cambridge passes) is in itself regarded as sufficient for upgrading teachers. Second, we believe that there must be some objective external assessment included in the procedures for awarding upgrading status. Mere attendance at or completion of a course is not enough. Third, such courses must generally be mainly part-time, involving therefore real effort on the part of teachers. Where the opportunity for full-time college attendance is offered, it should not be on full pay. In other words the effect of these three conditions is to ensure that a route is open to any teacher to improve his or her lot, but that there is nothing automatic and in no sense a soft option involved. It might well be that only a minority of teachers would opt to make use of the avenues thus opened up.

6.99 In respect of upgrading untrained teachers our major proposal is that, during the first year of the programme of probationary teaching for Junior Certificate leavers entering teacher training, the best 450 untrained teachers should be given the opportunity to enter the otherwise vacant places at the training colleges to obtain full Primary Teachers qualification. As emphasized earlier, the Commission does not believe that a massive in-service upgrading scheme would be desirable because it would fill the ranks of the teaching service with less well qualified teachers than will be available in future.
In order to provide teachers to staff the classrooms in the meanwhile, the proposals for a national service and for a probationary year prior to entrance into the teacher training colleges have been put forward. For the relatively small numbers of untrained teachers who will remain, a modest in-service upgrading programme might usefully be offered. This should perhaps be an improved version of the former Francistown in-service course.

6.100 If our strategy for a national service and probationary year were not accepted, however, a much larger in-service upgrading programme of the kind outlined in the National Development Plan would be needed to improve the classroom skills and basic knowledge of untrained teachers. We have reservations about this alternative strategy because it presupposes:

(a) that there are large numbers (900 - 1 000 is the Plan figure) of untrained teachers with the potential to become valuable permanent members of the teaching force, and,

(b) that a part-time course of sufficiently high quality to realise this potential can readily be mounted.

We are concerned about both these assumptions because Standard 7 education is not a strong foundation on which to build the sort of professional competence that should characterise Botswana's education system in future. If it were decided to proceed with an ambitious programme of in-service upgrading -- and we understand that a project memorandum has been prepared -- it would be necessary to insist on the following safeguards of quality. First, entrants to the course should be selected carefully on the basis of likely ability to meet the standards required. Second, there must be evaluation of what the teacher has learned and put into effect in the classroom rather than award of the certificate for simple attendance. Finally, there must be a well-organised system of field support to supplement the face-to-face teaching, radio, and correspondence elements of the course.

6.101 The procedure for promotion from Elementary Teachers' Certificate to Primary Teachers' Certificate should basically be the same as the above, but higher levels of entrance and terminal performance should be expected. To gain PTC status, competence in Setswana, English and mathematics, should be at least at Junior Certificate pass level.

6.102 Specialist courses for Primary Teachers' Certificate might follow a similar pattern of organisation but the content would need to be rather different concentrating on the subject area concerned. We believe it should be possible to specialise in infant methods for example. Similarly, specialisation in subject teaching for the upper primary grades should be possible, e.g. science, mathematics and English. The University's Diploma in Education already provides a framework for such specialist studies. Those successfully completing the course would generally have to be deployed in the larger primary schools where their specialist skills could be fully used. Specialist courses should also be available for secondary teachers, and for teachers at either level who are being prepared for new responsibilities, for example as headmaster or vocational guidance specialists.

6.103 The final category of in-service training is courses to inform serving teachers and headmasters of new developments in the profession or in their subject field. These will be particularly needed to disseminate information on curriculum and syllabus changes. Where these concern just one or two teachers from each school, we suggest they might well take place at central locations such as teachers colleges or secondary schools at weekends or during vacations. Where it is a question of a new approach by an entire school, however, it may often be very much more effective to run courses either regionally or at the schools themselves, for the entire staff, so that all may understand and discuss together the efficacy of the new method, material or approaches.

6.104 If in-service programmes of all these different kinds are to be available special efforts may be needed to train those who would be responsible for country-wide in-service training such as college tutors, heads of schools, or professional officers of the Ministry of Education. The objective of these programmes would be to provide the education system with a cadre of men and women who could assist in in-service programmes for teachers on a continuous basis in their own areas.

6.105 *The Commission recommends that:*

Botswana should develop a comprehensive range of in-service courses including:

(a) upgrading of teachers at all levels as an integral part of the teachers career structure,

(b) specialist courses,

(c) refresher courses, and courses on new techniques and curricula. (R-107)

Upgrading courses must have a professionally relevant content, and be subject to objective external assessment. They will be mainly part-time. (R-108)

The Roles of the University and the Teacher Training Colleges

6.106 The University can play a significant part in improving the teacher education system as a whole, in addition to its own role of training secondary teachers. In the first place the University is the place where most Batswana tutors will be trained. Special options should be available in the proposed education degree for those who wish to become tutors in training college. Normally students who take this option should already have had teaching experience in primary schools, prior to university entry. It is not satisfactory for inexperienced graduates, with no specialised preparation, to be posted to the colleges as tutors. We note that this requirement will be better met if a national service scheme is introduced for those leaving Form V.

6.107 Second, the University can make a significant contribution to providing in-service training for groups of key educational professionals: education officers, inspectors and supervisors, teaching advisers and headmasters. In this way it can have a potentially far-reaching effect on the improvement of quality throughout the education system.

6.108 Third, the primary teacher training colleges are affiliated to the Faculty of Education. The University approves the syllabus and sets and supervises requirements for certification. The working relationship between the University and the colleges seems to be formal, limited in scope and less than satisfactory in operation. The Commission urges the University and the colleges to discuss ways of improving the workings of the National Council on Teacher Education and improving the communication and cooperation between the University and the affiliated colleges.

6.109 Fourth, the Faculty of Education in close cooperation with the colleges could and should provide more professional contact for serving teachers through the use of conferences, joint research undertakings, and the publication of regular professional journals and other teaching materials.

6.110 *The Commission recommends that:*

> *The proposed education degree should include a special option for aspiring training college tutors, who should normally be drawn from those with primary school teaching experience before entering university.* *(R-109)*
>
> *The University should develop its role of providing professional leadership and support for the teacher education system in Botswana. (R-110).*

CHAPTER 7

Out-of-School Education

INTRODUCTION

7.01 Throughout this Report the Commission has referred frequently to the need to provide a network of opportunities for learning out of school as a central feature of our strategy of educational development. The role of out-of-school education is potentially important in any country, but particularly so in Botswana, where a large proportion of the adult population, especially in sparsely populated areas, has received no formal schooling. Moreover, because a massive expansion of full-time schooling at secondary and post-secondary levels is beyond the resources of the country, and of individuals, many people will only be able to continue their education through part-time study.

7.02 There are many things that people need to learn -- in relation to jobs, the home, the law, their civic duties and rights, health care, etc. -- that may not necessarily be best learned in schools. In traditional society many of these things were learned through the family and community. But the rapid rate of social change has put great strains on the family and community as sources of informal learning, and it may be necessary to supplement what they can do by providing other facilities and institutions of a more specialised nature.

7.03 Changes in agricultural practice, improvements in the public health system, village development and rural development generally -- all matters of high national priority -- depend on a wide diffusion of new knowledge, skills and attitudes. Moreover, the rural people of Botswana will need education if they are to benefit fully from these changes. The question facing Botswana in out-of-school education is, therefore, how best to manage its resources in order to help its adult people cope with a changing society and economy.

7.04 Despite limited resources and severe shortages of manpower, Botswana has produced a number of innovative and effective programmes of out-of-school education. Perhaps the Brigades (discussed in paragraphs 7.32 - 7.41) have attracted the most outside attention, but the correspondence courses and other programmes of the Botswana Extension College (BEC), the University's Department of Extra-Mural Services (DEMS), the Agricultural Information Department, Family Welfare Educators, and such programmes as the Tribal Grazing Lands Public Consultation are also valuable elements in the total out-of-school education picture. Our purpose here is not to single out particular courses for praise or criticism, but to try to analyse the entire range of out-of-school education opportunities in order to suggest ways of strengthening them. (See Annex 9 for descriptive details on these programmes).

7.05 In its terms of reference, the Commission was asked to investigate 'non-formal education'. The definitions of formal, non-formal and informal education in current use among the Ministries and the Non-formal Education Sub-committee of the Rural Extension Co-ordinating Committee (RECC) appear to be the following (based on Philip Coombs' widely known definitions):

1. Formal education is the hierarchically structured, chronologically graded, educational system, running from primary school through the University including, in addition to general academic studies, a variety of specialized programmes and institutions for full-time technical and professional training.

2. Non-formal education is any organised educational activity outside the established formal system - whether operating separately or as an important feature of some broader activity - that is intended to serve identifiable clienteles and learning objectives.

3. Informal education is the lifelong process whereby every individual acquires attitudes, values, skills and knowledge from daily experience and the educative influences and resources in his or her environment - from the market place, the library and the mass media.

7.06 In practice, however, Botswana's Non-formal Education Sub-Committee has concerned itself almost exclusively with extension work and the Commission feels that 'non-formal education', thus defined, is too narrow a concept to encompass the range of learning opportunities which should and do exist outside the schools. In addition to extension programmes providing opportunities for people to learn such things as improved methods of agriculture or better health practices, one must take account of educational courses taken through correspondence or part-time study, vocational training on the job, and informal learning facilities such as libraries and clubs. All these activities are significant in themselves and should be treated as elements of a single education system in Botswana. We therefore prefer to use the term 'out-of-school education' to include non-formal education as defined in Botswana but also to embrace other forms of learning beyond the school.

7.07 Aims and Objectives

The Commission believes that the guiding principle for the development of out-of-school education in Botswana should be to extend the possibilities and choices for all Batswana to learn. The planners of out-of-school education should have the broadest perspective on their task, recognising that although there are many different contents and needs of education programmes, the people to whom they are addressed are often one and the same ; and that the resources -- in terms of school buildings, radio, extension workers, etc. -- may already serve, or be able to serve, several programmes. They should therefore aim not only at designing programmes and campaigns to 'deliver' official information in 'messages' to the people, but also at making opportunities, facilities and learning materials more widely available so that people can draw upon the educational potential of their work, their leisure time, and their social commitments. Thus, for example, an overall system of out-of-school education should include such provisions as incentives to industry to train employees on the job; an entitlement in the terms of service of civil service and other workers to release for so many hours each week to undertake part-time study; and a mobile library service in rural areas. Just as we prefer to avoid the restrictive interpretation of the term 'non-formal education', so we feel it may be more suggestive in this discussion to speak of 'opportunities' rather than strictly 'programmes' as the business of out-of-school education.

7.08 On the broadest level out-of-school education should aim, like in-school education, to further the national principles of democracy, development, self-reliance, unity, and *kagisano*. By definition it may be expected to contribute to individuals' development and to the promotion of social welfare. In more specific terms it may serve a variety of purposes as follows:

(a) helping people to gain marketable skills, and upgrading the skills of persons already employed through in-service training;

(b) enabling individuals to acquire knowledge and experience specific to their needs, for either functional or recreational purposes;

(c) providing information related to improved practices and products, of use by individuals and communities alike --concerning, for example, health care, nutrition and agriculture;

(d) encouraging community awareness and co-operation in activities to fulfil common needs, as in campaigns for self-help, and the development of a sense of national identity;

(e) publicising and promoting issues, programmes and events of relevance to all persons throughout the country; for example, educating the people about Botswana's new currency, general elections, the tribal grazing land programme, and other national affairs;

(f) providing an outlet for cultural or artistic displays and materials.

Out-of-school Education and the School System

7.09 Out-of-school education should not be merely a second-best alternative for people who did not go to school. While a school, offering a comprehensive programme of regular and continuous study at a fixed time and place is desirable for the young, out-of-school education has some intrinsic advantages for older learners:

(a) It can take place part-time so that individuals need not withdraw from the family, workplace or community in order to learn. Some out-of-school programmes may actually take place in the home, on the job or in the *Kgotla*.

(b) Because it does not involve taking productive workers completely away from their occupations, loss of output and income is reduced.

(c) In so far as the main input of many forms of out-of-school learning is student time, and because permanent buildings are not always necessary, out-of-school education can be provided more cheaply than in schools and colleges.

(d) Programmes for out-of-school education can more easily be directed to specific and temporary learning needs as they arise. They are less committed to a set curriculum over a long period.

(e) Older learners are not generally willing to subject themselves to the authority of the teacher and the regimentation of the school.

7.10 Thus while each style of education has its own advantages, the Commission believes that the opportunities for out-of-school learning should be widened. In a few areas there might be direct alternatives to school programmes. For some adults, and for a rather higher proportion of adolescents, the Commission believes that Botswana should develop a range of part-time and correspondence courses to cover the same content as full-time courses after Form III. Generally speaking, however, contents and styles of the two kinds of education will be rather different, with the main requirement of adults being for educational opportunities which relate rather directly to their everyday life. The policy makers therefore should be focussing their attention on the complementarity and co-operation between the two systems, recognising that those who have had a good basic schooling will be best able to take advantage of some out-of-school learning opportunities and that sharing of resources may be to the mutual benefit of both. The possibilities of using school and college facilities for evening work or for conferences and courses in vacation time are numerous. Since primary schools and teachers are more widely distributed than any other institutions or staff, they constitute an obvious potential resource base for other activities. Teachers in the school system would often be pleased to earn extra money by teaching adult literacy classes, or evening classes in Junior Certificate subjects; and conversely schools would benefit from the help of agricultural assistants or health workers with their teaching and project work. Both sectors of education might gain from the pooling of resources for organisation and supervision, and for production of materials.

Types of Programmes

7.11 The Commission has identified the following broad types of out-of-school education in Botswana:

(a) Extension activities; information, advice and 'animation'.

(b) Continuing education and vocational studies; normally through evening classes and correspondence courses, and often leading to formal qualifications.

(c) Work or production-based training (job-related, on-the-job, or in-service) sponsored by employers, brigades, etc.

(d) Cultural, social and recreational programmes through clubs, libraries, museums, radio, etc.

Priorities

7.12 Although each of the four types of out-of-school education programmes is primarily directed at particular audiences, they must all be seen within the overall national priorities identified in Chapter 2. Women constitute an obvious priority group because of their numerical importance in Botswana and the critical roles they play in agriculture, nutrition and child-rearing. The rural areas have also been identified as a general priority for development, but such groups as urban unemployed, and out-of-school youth deserve greater attention as well.

7.13 Another priority which cuts across all of the out-of-school education programmes is literacy. A fully literate population is an important long term objective if Botswana's other national objectives are to be met. We do not emphasize literacy as a separate programme, because experience in other countries indicates that literacy should not be pursued in isolation from other development programmes as an end in itself. It is best acquired in the context of efforts to achieve greater productivity, health or control over one's environment; and, indeed, it will itself contribute to achievement of these objectives.

EXTENSION ACTIVITIES

7.14 We put this as the first category because it concerns the largest proportion of the population. It serves the needs and interests of people who are mainly outside the modern sector of the economy, either as producers, in agriculture, trades or services, or in a social context as citizens, parents and members of the community. Collectively the forms of out-of-school education covered by this category are often described as extension programmes.

Programmes

7.15 There are a number of different emphases in these extension programmes. Some of them are concerned to raise the productivity of individual workers in agriculture or other occupations, and to help individuals to improve their health and housing conditions and those of their families. Others have a community development focus and are aimed at stimulating communal enterprise or co-operative action, for example in the prevention of overgrazing. They may also range from programmes which concentrate almost exclusively on conveying a message from Government agencies to local people about the activities and policies of Government (which some call a 'top-down' approach); to programmes and services which seek to assist people to identify their own needs and desires and which aim to help them fulfil them ('bottom-up' approach). However, although it may be useful for analytical purposes to consider whether the content of these programmes is mainly producer-initiated or consumer-initiated, it must be borne in mind that they will often arise from a common perception by authorities and individuals of where long-term individual and community interests lie. One of the chief functions of these programmes is to help individuals to take a wider and longer term view of their interests.

7.16 As recorded in Annex 9, the main organisations in Botswana with extension programmes are the Ministries of Agriculture, Health, and Local Government and Lands. The Ministry of Agriculture engages in training and extension work to make the nation's farmers more productive and does a great deal to promote the use of new methods and equipment, seeds and fertilisers through farmers associations, committees, shows and fairs and it also runs 4B Clubs for young farmers. The Ministry of Health disseminates information on nutrition, maternal and child health and family planning and also conducts specific campaigns against smallpox or other diseases from time to time. The Ministry's family welfare educators are selected by the local community and return to the same community after their period of training. In sensitive fields like family planning and health, it seems more effective to use mature women from the local communities instead of young girls from other parts of the country. The Ministry of Local Government and Lands is responsible for the entire youth, social welfare and community development field, as well as specific programmes for housing, workcamps, Bushman Development, etc.

7.17 More recently the Botswana Extension College has been established as part of the Ministry of Education, to offer out-of-school programmes using printed materials, often in the form of correspondence courses, radio and face-to-face study and discussion. It has offered courses for members of Village Development Committees, at the request of the Ministry of Local Government and Lands, and played a central role in the large-scale programme of education on the Tribal Grazing Land Policy. The College is also concerned with out-of-school education for formal qualifications but it devotes more than half its resources to work in the non-formal sector. The Commission believes that the contribution of BEC to the total education system in Botswana is extremely important both because its methods -- both formal courses by distance teaching and non-formal courses -- offer the possibility of making education available to large numbers of people who could not be reached in more traditional ways. BEC plans to establish field offices in the major towns which can provide technical services concerning media, group instructions, etc. to other agencies working in these areas. BEC's work has been restricted by staff shortages: in the 1976/77 fiscal year it has been granted only three of the thirteen additional staff positions which it had requested and which Government agreed were necessary to enable it to maintain the quality of its work and experiment with both formal and non-formal education through distance teaching.

7.18 Extension work, especially in the areas of social services and youth activities, is an area where private and voluntary organisations are also active. The Botswana Christian Council and individual churches and missions provide resources and leadership for training programmes of many kinds, and there are also a number of women's organisations such as the Young Women's Christian Association, Botswana Council of Women and Girl Guides who conduct out-of-school education programmes. Voluntary organisations and community groups can often, because their membership and leadership is drawn from the local community, attract the support and involvement of ordinary people in a way that is difficult for Government agencies, and Government may well find that in many situations the most fruitful way to provide a service is through support of a voluntary body, or a local development association.

Co-ordination

7.19 A high priority in the field of extension is to ensure adequate co-ordination among the various agencies concerned. This task is being carried out by the Rural Extension Co-ordinating

Committee (RECC) which is a permanent body responsible to the Cabinet through the Rural Development Council. Although it is an advisory committee, the RECC has played an important role in organising and implementing such activities as the Tribal Grazing Lands Programme and the Committee's base in the Ministry of Finance and Development Planning has enabled it to provide valuable coordination of the efforts of many other agencies in the field of extension. RECC has established a Non-Formal Education Sub-Committee to devote specific attention to planning and policy in the non-formal education field.

Training

7.20 An area of potential cooperation is in the training of extension workers from the various bodies involved with agriculture, health, literacy, community development and social welfare. Despite the technical boundaries between these sectors a great deal of the work of their personnel is very similar. There would seem to be considerable scope for developing common training programmes in adult education techniques, communication skills, production and use of audio-visual aids, group conference organisation and so on.

Evaluation

7.21 The most important consideration in the development of the extension component of out-of-school education is the constant need to ensure that the programmes are genuinely serving the people and are meeting their changing requirements. One must constantly guard against the possibility that programmes may become self-perpetuating and serve only a small number of relatively privileged people. The objective of most programmes must be to educate people for self reliance, collectively or individually.

7.22 *The Commission recommends that:*

The manpower requirements of BEC be given higher priority in assignment of new staff positions to the education sector. (R-111)

Continued support should be given to the RECC as the official vehicle for coordinating extension programmes. (R-112)

DEMS, BAC, BEC and other institutions that train extension staff should work out common syllabi and joint courses in their staff training programmes, both to save resources and to encourage extension staff to work together more closely in the field. (R-113)

Criteria should be worked out for the evaluation of the effectiveness of extension work and evaluation should be an integral part of all programmes. (R-114)

CONTINUING EDUCATIONAL AND VOCATIONAL STUDIES

7.23 The Commission believes that there is a significant potential demand for part-time or wholly correspondence courses, providing knowledge and skills or leading to qualifications which individuals need for promotion at work, or for entry into jobs in the modern sector, or for admission to further studies. There have long been substantial numbers of students taking correspondence courses with South African or British correspondence colleges; there have also been a few evening classes organised by the Division of Extra Mural Services (DEMS) of the University, by private 'continuation' schools and by transient private vocational colleges. Until now, however, the quality of most of these out-of-school routes to obtaining formal qualifications has not been such as to provide attractive alternatives to regular school attendance. In the absence of wholehearted Government encouragement and support, part-time and correspondence studies have had low status.

7.24 In support of the strategy we have outlined earlier of placing greater reliance -- for educational, manpower and financial reasons -- on learning out of school, programmes must be better organised and of higher quality than hitherto. The creation of BEC has opened up the possibility of a much improved service of correspondence education, supported by radio programmes and some face-to-face study. So far, the courses offered by BEC have been aimed at people who have failed Junior Certificate or General Certificate of Education examinations or dropped out of school without completing a course, so that only the final stages of the courses leading to examinations have been offered through correspondence. In its present planning period BEC is preparing to offer programmes covering the entire post-primary course.

7.25 In the area of part-time attendance courses leading to Junior Certificate, Senior Certificate and General Certificate of Education the field has been left largely to private entrepreneurs and there have been no facilities of high quality. We now propose that the Ministry of Education becomes much more directly involved in the provision of part-time education and that evening courses (particularly in mathematics, science, Setswana and English) are made available at all those Government and Aided secondary schools in centres of population. These classes should be under the management of the schools themselves and use school facilities, with school staff participating in the programme drawing extra pay. Not all regular staff would be able or willing to participate and it would be necessary to supplement regular staff with other well qualified people from the community, perhaps including government officers and their wives where they are appropriately qualified and experienced.

Given possible shortages of staff and with limited numbers of hours of attendance at an institution, courses are bound to rely quite heavily on self-study by students and we therefore suggest the classes be linked with the correspondence programmes at BEC. The use of correspondence course materials as a basis for study could well make the difference between success and failure for many students working in this way. These principles should apply as well to vocational and technical training institutions, as suggested in Annex 3.

7.26 It is important that the Ministry and educational institutions see their responsibility for out-of-school students as a serious one, and be urged to experiment with the best ways of supporting such students. Without a commitment of effort and resources, even the combined use of school facilities outside school hours with correspondence lessons and broadcasts is in danger of being third rate education reserved for students with the greatest educational handicaps - those who did not manage to get into or complete, regular secondary school. But a programme of this kind can quickly justify itself. It can be considerably better than anything presently available out-of-school; and it will offer real possibilities for young people to obtain needed qualifications while they are working and earning.

7.27 There are a number of important ways in which help might be given to part-time students in order to support them in their studies and reduce the incidence of wastage which often tends to be high on these courses. Fees should be low and Government should consider refunding fees to successful students in full. Larger firms should be required to release employees for training and hours should be adjusted to suit the convenience of participants. Special arrangements should be made at secondary schools for use of libraries by part-time students and arrangements should be made to keep reading and study rooms open outside class hours.

7.28 In chapter 8 the Commission suggests the need for a senior post to be established in the Ministry of Education to promote programmes of continuing studies.

7.29 *The Commission recommends that:*

Government should formulate a policy with regard to part-time studies which will take advantage of the enormous potential of using schools or other facilities in evenings and weekends in a variety of courses leading to qualifications and upgrading. (R-115)

Part-time classes at regular schools and colleges should be under the control of the institutions themselves and should be linked with correspondence programmes. (R-116)

> *Establishments employing over 10 staff should be required to release their employees for at least one half-day per week without loss of pay to enable them to take part in courses approved by the employer and the Ministry of Education. (R-117)*

WORK- AND PRODUCTION-BASED TRAINING

7.30 Elsewhere in this report (paragraphs 5.99 - 5.106 and Annex 3) the Commission considers pre-service vocational training at the main Government training institutions: the National Centre for Vocational Training, the Botswana Training Centre, Botswana Agricultural College and National Health Institute. We regard such pre-service vocational courses - offered in educational institutions, prior to work experience for the most part - as part of the "formal" education structure of Botswana. The Commission suggests, however, that these institutions should also offer part time and evening courses of study. This would increase opportunities for young people to obtain skills that they and the country need, and would probably reduce the average costs of skill training. The institutions concerned have expensive plant and equipment and the maximum possible use should be made of them.

7.31 The principal kinds of out-of-school vocational education that we are interested in here, however, are Brigades training and training by employers, both of which are within the purview of the National Technical and Vocational Training Board. We discuss each in turn.

Brigades

7.32 The Brigade movement was started by Patrick van Rensburg in 1965 at Swaneng Hill Secondary School. The original objectives of the movement were to re-orient secondary schools and the educated elite towards the needs of the rural communities, and to offer low cost post-primary education to larger numbers of school leavers. These objectives have since evolved into providing vocational education through a productive enterprise which covers a large part of the cost of training and generates resources as well as employment for the community. Recently, Government has been helping to meet the training costs.

7.33 In 1976 there were 30 brigades at 12 centres with a trainee enrolment of some 1127 brigadesmen, and a further 806 production workers, instructional staff and managers on the payroll. The brigades have attracted considerable attention outside Botswana as a low-cost training programme for primary school leavers and as an innovative method of training through productive work. Within Botswana they have received some criticism in the past for the uneven quality of their work and the training they have provided.

7.34 In 1975-76 Brigades received Government support for the first time, of roughly P110 per trainee and this subsidy was increased to P185 per trainee in 1976-77. Although their programmes are not entirely comparable, (Brigades are normally 3 years while National Centre for Vocational Training courses are 1 or 2 years), it is interesting that the cost to Government per trainee completing the course at the National Centre for Vocational Training (NCVT) is considerably higher than for Brigade completers, who train for the same Trade Test C.

7.35 The basis of Brigades training is a two or three year course, roughly 80 percent of which consists of on-the-job training mostly in actual production (commercial) conditions, and 20 percent classroom work in English, Setswana, mathematics, development studies, and in the theoretical aspects of whatever skill the Brigade is offering. Experience has shown that a solid base of academic training is vital to the preparation of technical personnel if their skills are to be sought by industry and if they are to be able to assume a variety of tasks such as teaching, managing their own enterprises, or developing new skills as the need and opportunity arise. Dr French's report (Annex 3) emphasises the need for a more solid educational component in the Brigades.

7.36 The success of the Brigades must be mainly judged by the proficiency of brigadesmen (at present assessed by the trade tests), the commercial viability of the Brigades enterprises, and the subsequent employment experience of the trainees. A follow-up survey of several hundred graduates of Brigades, completed in July 1976 by the Department of Technical Education in the Ministry of Education reveals that seventy to one hundred percent of those who had taken a government trade test (specifically builders, carpenters and electricians) are reported to have passed. Eighty three percent of the Brigade leavers found work within three months of finishing their training, and another eleven percent were employed within six months. Eighty five percent of the respondents said that their new job was related to their training in the Brigades. A majority of the graduates from each training programme, except building and carpentry, have continued to live and work in the rural areas.

7.37 These results provide some encouraging evidence that the Brigades can train for employment successfully and contribute to the economic viability of rural Botswana. It should be noted, however, that in order to obtain jobs, many trainees have had to enter the modern sector or turn back to the Brigades for work after training. In farming, handicrafts and dressmaking wage employment is very rare and the trainees have tended to join in cooperatives often affiliated with the trusts that run the Brigades. The hope that the Brigades would produce self-reliant young men and women who could be successful in self-employment has yet to be fulfilled. This would be a real breakthrough because Botswana is short of entrepreneurs and managers who could start new enterprises and create employment.

7.38 Up to the present, in order to grow and develop the Brigades have been heavily dependent on expatriates and particularly volunteer instructors and managers. The establishment of the Brigade Development Centre (BRIDEC) in 1977 for the training of managers and instructors is an important step towards the goal of staffing the Brigades with competent local personnel. A more institutional or formalised structure for training instructors and managers can build upon the experience gained by the management training currently being carried on through the advanced courses at the Brigade Centre in Serowe.

7.39 While it is well aware of the difficulties which the Brigades have encountered, the Commission has been impressed by the effort to develop a low-cost system which links education and work, and by the flexible, pragmatic approach which the Brigades exemplify. We believe that it is important that they retain the degree of autonomy and responsiveness (made possible by the establishment of local Boards and Trusts) that enables the Brigades to maintain their quasi-commercial self-reliant style. The present administrative arrangements, under which the Government established the National Brigade Coordinating Committee (NBCC) in 1969 with a paid Secretariat within the Ministry of Education should continue. The NBCC has now four full time professional staff responsible for assisting in the development of new Brigades and with administration, finance, curriculum development, staff training and other support.

7.40 Even with the development of BRIDEC and considerable investment in capital and recurrent costs, Brigades will expand rather slowly, from roughly 1 000 trainees in 1976 to roughly 1 800 in 1980. The main reasons that is it difficult to expand Brigades more rapidly are there must be a viable local board or community trust before a Brigade is started and there must be markets for the skills and products of the Brigades. Another problem is the lack of managers and instructors. Unless Brigades remain sensitive to local demand they could soon be producing unemployable brigade-leavers.

7.41 It would be important to avoid unproductive competition or unnecessary over-lap in training functions between the Brigades, the Botswana Training Centre (BTC), the National Centre for Vocational Training (NCVT); and in the area of production between the Brigades and the Botswana Enterprise Development Unit (BEDU). Regular consultation between the bodies concerned is desirable so as to seek ways of co-operation and to ensure that the economy can absorb the trainees, as well as the goods and services, that they produce.

Training by Employers

7.42 In order to develop the skills of their employees and to introduce them to new techniques and knowledge many public employers and private firms run programmes of in-service training for their workers, generally of fairly short duration. The largest firms and Government organisations may have the capacity to mount in-service programmes themselves through their own training schools and colleges, or by using their own teams of supervisors at the work place. Education itself is one example of this where, as discussed in chapter 6, the Ministry's In-Service Team and the teacher training colleges work together to help serving teachers. In other cases, however, employers will find it useful to draw on the expertise of other educational institutions in providing theoretical background and training in general skills. This may be cheaper to the individual firm and is in the national interest as it reduces duplication. Some examples include:

(a) the use of the Botswana Training Centre by Government Departments for short in-service courses in administrative skills;

(b) courses in technical skills run by the National Centre for Vocational Training;

(c) in-service courses at the Institute of Development Management of the University in management and administration

(d) training provided by the Division of Extra-Mural Services to officials of local land boards, members of district councils and village development committees;

(e) courses organised by the Botswana Extension College, using distance teaching methods, for members of district development committees and agricultural demonstrators.

7.43 Training by employers will always be an important aspect of skill development in Botswana, as elsewhere. At present, however, large employers that do provide training risk losing their trained workers to other firms that attract trained workers away through offers of slightly higher salaries. Two actions would alleviate this problem:

(a) establishment of a scheme whereby all employers are required to pay for training through taxes or a training levy, and

(b) establishment of a national apprenticeship scheme.

The relative advantages of a training levy or tax incentive scheme would have to be considered carefully in consultation with employers, to determine which fits Botswana's needs best. Apprenticeship schemes have been frequently suggested but no action has been taken. Training by employers, through apprenticeship and other programmes, would expand the national training capacity considerably, at relatively low public cost.

7.44 *The Commission recommends that:*

Government should continue to support the Brigades but management should be considerably tightened up with regard to accounting procedures and safety practices. (R-118)

The theoretical component of Brigade training should be increased, and the courses should follow detailed objectives for the acquisition of skills and knowledge, with records kept of students' progress in each area. (R-119)

The training of Brigade instructors and managers should be developed as quickly as possible, perhaps using the National Centre for Vocational Training and advanced Brigade courses until BRIDEC is in full operation. (R-120)

Government should work with employers to formulate policies to provide incentives for training programmes in the private sector, including apprenticeship and training levy or tax incentive schemes. (R-121).

CULTURAL AND RECREATIONAL PROGRAMMES

7.45 We believe that a rich cultural and recreational life of a community is both an 'end' of development, that is to say a part of the richer life that Batswana seek, and at the same time a means to development. The development of a nation's language, literature and arts is not simply a form of consumption, but can be a means of arousing people's consciousness of their situation and problems, and of directing their energies to solve their problems. The Commission suggests that Botswana should apply her cultural resources much more effectively to the cause of education, bearing in mind that people learn most readily from what is interesting and entertaining. We see a need to establish a body with responsibility for coordinating and programming activities in the cultural and recreational field, and we make a specific recommendation in chapter 8 (paragraph 8.24).

7.46 Any programme of cultural development must start with the Setswana language and literature. Setswana is a vital medium of communication in the country and is the vehicle through which the national culture is largely expressed. A major effort is needed in standardising the orthography and developing the vocabulary of the language, in translating works into Setswana, in encouraging original writing, and in recording the myths, legends and poetry of the people. This requires a conscious and co-ordinated effort and cannot be left to chance. A special institution needs to be created for the purpose.

7.47 The availability of reading material, particularly in Setswana but also in English is of critical importance to the maintenance of literacy amongst school leavers, and to the cultural development of Batswana and the creation of an informed public opinion amongst them. The Commission has not been able to study this problem in detail and recommends that Government should investigate means to improve the production and distribution of reading materials in the country. This should include ways in which support and encouragement might be given to writers, publishing, printing and distribution of written materials and the operation of the library services, both in educational institutions and those serving the public at large.

7.48 The National Library Service including a network of mobile rural libraries can also play an important role in providing reading materials and other audio-visual presentations for adults as well as school children.

7.49 Closely connected with the foregoing is the role of the mass media, particularly Radio Botswana and the Information Services which produce the Daily News. The radio reaches out to a very wide audience, literate and non-literate, is an important medium both for conveying information, and for informal education through general interest and entertainment programmes. Publications like the Daily News and Kutlwano reach fewer people but are seen by many of those who lead opinion and could play a big role in out-of-school education through special features on subjects like health and agriculture and items directed towards teachers and students. The possibility of Government subsidy for local newspapers and journals should also be considered.

7.50 The National Museum has a key role to play in programmes of national cultural development, both in recording and preserving the art, music, artifacts and oral traditions of the many different ethnic groups in Botswana, and also in encouraging appreciation and development of these varied cultural forms. It also has an important educational function in cooperation with the schools.

7.51 *The Commission recommends that:*

An institution for the development of and research into Setswana should be established in Botswana, possibly through the creation of a Centre for Setswana Studies at the University. (R-122)

The Government should investigate means to improve the writing, production and distribution of written materials in Setswana. (R-123)

The Government should provide more adequate staffing and other support to the National Library Service, the Information Services and the National Museum. (R-124)

RESOURCES AND FACILITIES FOR OUT-OF-SCHOOL EDUCATION

7.52 Each of the four types of out-of-school education programme which we have reviewed above has a certain distinctiveness of character, but to some extent all use the same kind of resources and there are a number of facilitating agencies which do or can serve them all. In planning out-of-school education Government must constantly have in mind the possibility of sharing resources and facilities between educational programmes and the need to ensure that resources in the formal school system or any one of the branches of the out-of-school system can be tapped by others.

Buildings

7.53 These are obvious common resources that can be made available on a shared basis for courses of different kinds. The Commission has already expressed the view that school classrooms, laboratories, libraries and recreational facilities should be made available to out-of-school learners and to the community at large. We also note that the Ministry of Agriculture has generally been willing to make available the premises of the rural training centres to other agencies as needed. We believe that all buildings and facilities of this kind should be regarded as a common pool which should be available, on free loan or for hire as appropriate and depending on the identities of the lender and user, for any kind of educational purpose. It should not be necessary for each education and training programme to possess its own buildings.

Communications Systems

7.54 Radio, Information Services and other communications systems should be seen as common resources to be planned and programmed to the best advantage of out-of-school education programmes. We have already referred to radio's potential in connection with cultural and recreational programmes, but it has a much wider role than this, being a potential powerful tool in support of extension services, out-of-school learning by correspondence, and cultural programmes. In a country of Botswana's size and low population density the outreach of the radio is an especially important feature. We urge that the staff of Radio Botswana be strengthened to enable the radio to be used more intensively for educational purposes. We recognise, however, that there are limits to the amount of broadcasting time that can be made available to educational agencies at the times when adults are most available to listen, and that minority programmes cannot be allowed to supplant programmes of more general interest at peak listening times.

Staff

7.55 While there are obviously limits to the extent to which staff can be shared, we do see scope for school teachers and other educators to give help to out-of-school programmes, and for those working out of school to help in schools. The school teachers, for example, may give English or mathematics classes to Brigades or the agricultural extension officer may help with a school programme. While such link-ups must be arranged locally, parent ministries have a key role to help by devising a broad framework of regulations under which these exchanges may take place. Staff from all the regular education programmes should be encouraged to make a further part-time contribution, on a voluntary or paid basis according to the circumstances, by participating in teaching part-time courses.

7.56 This requirement means that there is a need to train existing and future educational staff in the techniques of adult education. Like other sectors in Botswana, out-of-school education has been almost entirely staffed by expatriates. Although it would be unrealistic to expect to be able to localise these senior positions much more quickly than in other sectors, the Commission considers that an early start should be made with training of local personnel for out-of-school education both as teachers and administrators. There is a need for both pre-service, and in-service training on out-of-school education. The Department of Extra Mural Services and other agencies already have interests and experience in this field.

7.57 In view of its serious lack of manpower, Botswana must resist the temptation to establish separate cadres to provide out-of-school education and other services in areas of nationally identified priority (for example women, youth, literacy ...); rather she should concentrate on meeting these needs through existing channels.

7.58 *The Commission recommends that:*

Basic facilities such as school buildings and communications systems be regarded as a common pool and that their use be planned and programmed for maximum efficiency. (R-125)

The Department of Extra Mural Services should develop a course for primary and secondary teachers in approaches to adult education. (R-126)

The Ministry of Education with the nonformal education subcommittees of the Rural Extension Coordinating Committee should work with the Directorate of Personnel to develop a systematic scheme of service for staff working in out-of-school education programmes covering recruitment, training and terms of service. (R-127)

PLANNING, COORDINATION AND EVAULATION

The administration of education, both school and out-of-school, is treated in some detail in chapter 8. Here we may state briefly our belief that the planning, coordination and evaluation of the four types of out-of-school programmes identified in this chapter should be carried out respectively by (1) the Rural Extension Coordinating Committee, (2) the Ministry of Education, (3) the National Technical and Vocational Training Board, and (4) a new Council in the cultural, informal education sphere. Because of the inter-ministerial nature of out-of-school education, the overall responsibility for planning and coordination among the four sectors should fall under the National Committee on Educational Policy. Since the Ministry of Education provides the chairmanship and secretariat of the National Committee on Educational Policy and is responsible for more out-of-school education programmes than any other Ministry, the Commission has recommended that additional senior staff be appointed with responsibility for planning and evaluation of out-of-school education. We submit a specific recommendation on this point in chapter 8 (paragraphs 8.40, 8.46).

7.60 Within the general framework of policy coordination and planning discussed above, there is a need for detailed and specific planning of all four categories of out-of-school education at several levels:

(a) at the national level,
(b) in the Ministries involved, and
(c) at the District level.

The National Level

7.61 The National Committee on Educational Policy should provide over-all policy guidance on such issues as the relative emphasis to be given to out-of-school education. While the Commission believes strongly that out-of-school education should receive much greater emphasis than it does at present, it is pointless to say that more of the country's educational resources should flow into out-of-school education until programmes are developed to utilise these resources. Throughout this Report the Commission has urged that the discontinuities between full-time and part-time studies and between in-school and out-of-school education be reduced. We feel that it will be extremely important for Botswana to develop a more complete array of out-of-school learning opportunities. It is hoped that the National Committee on Educational Policy, as the body responsible for guiding the implementation of our recommendations, will emphasise this aspect of the strategy proposed, and will urge the expansion of more out-of-school alternatives to the formal education system.

7.62 The Commission has noted that, while there are many dynamic out-of-school education activities in Botswana (notably the Brigades and extension programmes), the level of recognition of and commitment to out-of-school education is generally low. People are willing to acknowledge that learning out of school is a good idea, yet there is a strong tendency to think of education in traditional, in-school terms. One of the tasks of national level policy and planning efforts will be to develop a clear conceptualisation of out-of-school education: what it is, what its purposes and benefits are, and what must be done to realise its potential in Botswana. We hope that our Report -- not only this chapter but also our basic strategy -- will serve as a catalyst, leading to a clarification of the concepts and goals of out-of-school education.

7.63 For each major category of out-of-school education, a national-level coordinating and policy body should oversee detailed planning: the Rural Extension Coordinating Committee and its Non-Formal Education Sub-Committee for extension and related programmes; the Ministry of Education for continuing education programmes through distance teaching; the National Technical and Vocational Training Board for vocational programmes; and the proposed cultural council for informal education programmes, notably libraries. Obviously there will be overlaps between these areas, but we feel that the pluralistic pattern of coordination between ministries that has been established for extension and non-formal programmes is preferable to more centralised planning. This pattern should now be extended to programme planning for all four types of out-of-school education. We note with approval the steps being taken by RECC to initiate inter-ministerial planning in its area of responsibility.

Ministry-Level Planning

7.64 Most ministries' plans for out-of-school education are embedded in their total sector plans. It is desirable, in the Commission's view, to be able to identify out-of-school education plans specifically, because:

(a) this permits assessment of the total magnitude and direction of out-of-school education activities;

(b) it permits policy direction (e.g. toward certain target populations); and

(c) it can avoid situations in which simultaneous out-of school education programmes encounter constraints in terms of field staff or media availability, financial resources, etc.

Ministries should formulate their plans for out-of-school education programmes explicitly, both for their own needs and as part of the total out-of-school education programme planning.

District-Level Planning

7.65 The Commission understands that steps are being taken actively to incorporate local and District-level planning in the national development planning process, and that planning of non-formal education programmes at the district level is an element in this process. This is highly desirable, not only as a general principle, in keeping with the principle of democracy, but also because consultation at the district level brings into the planning process specific information (on needs or on impact of on-going programmes) that is not provided from other sources. District Development Committees and Village Extension Teams should continue to play a role in preparation of district plans for out-of-school education, and the district plans should be incorporated in national plans.

Planning from the Top or Planning from the Bottom

7.66 The issue of "top-down" as against "bottom-up" planning was raised in the Non-Formal Education Conference that the Commission attended (Annex 9). It is a commonplace to say that the people who receive or "consume" out-of-school education should have a voice in decisions on what sorts of programmes are to be offered. As noted in the preceding paragraph, steps are being taken in this direction at the district and village level. The Commission clearly approves the concept of planning from the bottom upwards, but wishes to raise two points of qualification. First, people cannot usefully give opinions on subjects with which they are unfamiliar. This implies that, for effective "bottom-up" planning to take place, client populations to be served by out-of-school education must be provided with information on the sorts of programmes that are or might be available if they elect to have them. Second, there are some instances in which "top-down" planning is appropriate. What is important here is that, even though certain plans and policies can only be established centrally, two-way consultation as in the case of the Tribal Grazing Lands Policy, is desirable. In this sense, also, out-of-school education can make a valuable contribution.

CHAPTER 8

Organisation, Administration and Planning

INTRODUCTION

8.01 Administration of education has been under the same pressures as other government services in Botswana since Independence. The growth of the administration has been unable to keep pace with the rapid expansion of services, and the shortage of qualified personnel has been acute. The position of education has been especially difficult because it provided a reservoir from which Batswana teachers and administrators were drawn off in the process of localising the Civil Service.

8.02 The size and complexity of the tasks facing the educational administration at national, regional and school level will certainly continue to grow. We are conscious that our own recommendations, to the extent they are accepted by the Government, will involve a heavy administrative burden. This will require a strengthening of the administrative staff, a revision of organisation and procedures, and a change in administrative style. In many hearings and submissions the Commission heard criticisms of ineffectiveness and delays, on the part of the Ministry of Education in particular, and also of the local councils and school and college administrations. This was confirmed from our own observations. We were encouraged, however, to find a growing awareness of the problem on the part of the competent authorities.

8.03 It is tempting in any Report of this kind to suggest that the system could be improved by the creation of many additional posts and new units. We do suggest some expansion of the administration but we recognise that Botswana is short of financial resources and even shorter of trained manpower. Education must compete with other sectors for scarce resources, and although we think its overall share of national resources should be increased, it is clear that restraint must be exercised. In general in a country with a small population like Botswana it seems better to give existing bodies additional functions rather than proliferate new organisations. The critical factor is in fact the competence and motivation of personnel in key administrative positions. The overriding importance of the quality of those in charge of the education system must be borne in mind throughout the sections that follow. We return at the end of the chapter to questions of the recruitment, training and deployment of educational personnel.

General Principles

8.04 A first main theme of our Report is the need to view all education in Botswana as a unified system, comprising not only government schools but also unaided schools; not only general schooling but also vocational education; not only government training institutions but also brigades and on-the-job training by employers; not only institutional education but also out-of-school learning that takes place on the farm or over the radio; not only full time learning, but also evening classes or day-release courses. We have also stressed that this system exists within an overall social framework and that greater recognition should be given to the fact that the school is part of its local community, and that education as a whole is inextricably linked with the economy, income distribution and the job market. What this implies in administrative terms is that education in Botswana must be recognised as a sector in which the Ministry of Education gives leadership, but does not have exclusive responsibility. Many parts of the system are managed, and indeed are best managed, by other agencies, both public and private. Arrangements are needed to define responsibilities and to coordinate action but it will not be proper or wise for the Ministry of Education to attempt to run all educational services in Botswana. We comment upon allocation of responsibilities later in this chapter.

8.05 A second theme we have stressed is the need to develop and improve the education system in terms of both of the learning outcomes and the efficiency with which it uses resources. What is required here is a greater professionalisation of the management of the education system and a greater awareness of the relationship between the 'inputs' (the characteristics of learners when they begin learning, and the resources in teachers, buildings and materials that are invested in them), the 'processes' of education that take place in courses and schools, and the 'outputs' in terms of greater competence or changed behaviour. This requires specialists in various branches of applied education, such as curriculum development and course design, testing, career counselling, communication and teaching method, schools broadcasting, inspection and so on. It also needs statistical, planning and finance expertise. Botswana needs to build up, through training and work experience, her capacity in these areas.

8.06 Third, we have repeatedly stressed the need for democracy and self-reliance. This has implications for the way the school system and other educational courses are run. It suggests that there should be extensive consultation over the making of policies and decisions, and that a wide range of interested people should be enabled to contribute their viewpoints, as indeed they have so valuably done in our own work. It also implies that so far as possible decision making powers should be devolved to the level where people are most affected by them. This is all the more important in Botswana where lines of communication are long because of the physical nature of the country, and where there is a shortage of administrative capacity at the centre to regulate in detail what happens in faraway institutions.

8.07 If we summarise the foregoing discussion in terms of its implications for administration of education in Botswana, it suggests a gradual move in style and organisation away from a colonial type of system in which the task of the Ministry of Education is largely seen as detailed control of government schools, deciding, authorising and ordering what they should do. Botswana should progressively establish a system where the management of the education system, widely conceived, consists of providing a policy and planning framework, with the necessary professional support services, which sets clear objectives for institutions, teachers and learners but gives them more freedom to to make choices over the disposal of their time and resources, and gives them responsibility for detailed executive work. Frequent specific directives and detailed regulatory procedures as a way of controlling the education system trend to be replaced as instruments of control by policy guidelines, incentives, information and advice. But institutions and teachers must be held answerable for their achievements, and to ensure that results are satisfactory, checks must be made on performance. This should be through a system of inspection at regular intervals and not by a stifling day-to-day oversight which inhibits responsibility. The change in style and organisation that we recommend implies that Government review the present education law and regulations, which largely reflect past administrative patterns.

Participation and Consultation

8.08 A major implication of the national principle of democracy is that those closely affected by national or local policies should participate in their formation. This principle is built into the constitution of Botswana, which has elected bodies at both national and local level taking decisions about the operation of the education system. It should be given further expression through the establishment of boards of governors for secondary schools and the operation of parent-teacher associations. While Parliament and local councils may in their respective spheres of responsibility exercise broad oversight of education policy and take major decisions, the detailed execution of policy must often be left to the administrators. It is most important that at both levels--the policy making and the executive--there must be the widest information and consultation.

8.09 Consultation is important, not just because people have a right to know and to express their views, but also because the very process of consultation may elicit more positive response to new measures from those whom they most affect. Moreover, feedback in the process of consultation may help to avert serious administrative mistakes, such as the announcement of measures inappropriate to the actual situation in the schools. The Commission has been pleased to note that many representative and consultative bodies do exist, for instance among secondary heads and in the teacher training sector, but it has been disappointing to find that meetings of the bodies concerned tend to be rather sporadic. We would hope that associations within the education sector would have at least annual conferences and meetings of their own members to which official personnel would be invited, and that regular consultative meetings between them and the Ministry would also take place. The Ministry should give encouragement and occasional tangible support to such bodies. The position of the Botswana Teachers Union is potentially very important in this respect. The sense among all teachers of belonging to a respected profession would be greatly enhanced by being able to participate in discussion of issues affecting their work.

8.10 *The Commission recommends that:*

Government encourage participation by laymen, teachers and other groups in the management of the education system. (R-128)

Professional bodies should be given support and encouragement by Government and should be regularly consulted on issues affecting them. (R-129)

8.11 COORDINATION AT THE NATIONAL LEVEL

Inter-ministerial Coordination

While the main responsibility for educational policy rests with the Minister of Education--under the President and subject to Parliamentary approval--other parts of the Government are very much concerned with the implementation of educational policy and must be consulted, at both Cabinet and official levels. The Ministry of Education does not run all education institutions or programmes in Botswana and arrangements for liaison and coordination within Government are clearly necessary.

8.12 The main coordinating body for Government policy towards education is the National Committee on Educational Policy, which includes the Permanent Secretaries of the Ministries of Education, Finance and Development Planning, and Local Government and Lands, the Director of Personnel, and the Rector of the University. This Committee brings together the major interests within Government concerned with education and is clearly of great value when, as at present, major considerations of educational policy are under review or when a new Development Plan is being drawn up. Its potential function is wider than this, however, and we consider that this body should regularly review education policies and the progress that has been made in implementing them within the framework of the national development plans.

8.13 The National Employment Manpower and Incomes Council (NEMIC), on which the Ministry of Education is represented, is potentially a useful forum for considering the relationship between education and training and the job market, and in particular questions on educational qualifications in relation to recruitment, promotion and pay. Unfortunately the Council appears to have been inactive recently. The Commission has emphasised elsewhere that too great reliance upon formal educational certificates by public and private sector employers will lead to an unhealthy concentration on passing examinations to the detriment of other educational objectives. We have also stressed that public demand for different types of education to a great extent reflects the income benefits associated with them. Because of these close linkages between education, qualification and income, we hope that NEMIC can become a more effective instrument for policy planning in its field.

Coordination of Out-of-school Programmes

8.14 As regards coordination and liaison between the bodies running out-of-school education programmes, we indicated in chapter 7 (paragraph 7.59) that the National Committee on Educational Policy could be the forum for securing any necessary harmonisation of policies and activities in the four different areas of out-of-school education identified by the Commission. In each of the four areas the policy should be to use and strengthen the existing machinery where possible.

8.15 Of the four categories of out-of-school education which we identify in chapter 7, there is already a coordinating body for extension programmes in the form of the Rural Extension Coordinating Committee (RECC) and its Nonformal Education Sub-Committee, which appears to be working effectively.

8.16 In the case of the continuing educational and vocational studies, it is primarily a Ministry of Education function to organise and oversee such programmes. There would not at present appear to be any need for a coordinating body. Rather, we suggest below that an officer be appointed in the Ministry with responsibility for this sector of education.

8.17 In the field of vocational training, the National Technical and Vocational Training Board (NTVTB) serves an advisory and coordinating purpose. This body has been inactive recently. We believe that the NTVTB has an important role to play in promoting policies such as the establishement of the National Scheme of Vocational Training, proposed in the Fourth National Development Plan, and we broadly endorse the suggestions made by our consultant Dr. French in his Report to us regarding the membership and possible mode of operation of the NTVTB (see Annex 3). These are that the Board should comprise representatives of all the Ministries and parastatal organisations with training interests and responsibilities (the National Centre for Vocational Training and Botswana Training Centre, the Brigades, public and private employers, trade unions and the secondary schools); and that there should be a series of committees in the areas of labour liaison, trade testing, craft training, technical training, commercial and administrative training and instructor training. The NTVTB must, if it is to be effective, hold regular meetings and have a permanent secretariat responsible for processing its work and decisions and reporting on follow-up action.

8.18 We also identified cultural and recreational programmes as a category of out-of-school education activities. Although there is a National Sports Council, there is no coordination body for cultural affairs and we believe that it would be desirable to create a separate National Cultural Council to advise Government on cultural policy and to oversee the development of the national language and of cultural and recreational activities. Its secretariat should be in the Ministry of Home Affairs. Membership of the council would include educational bodies, the museum, the National Library Service, Information Services, and other groups, as well as members of the public.

Responsibility for Primary Education

8.19 The problem of divided responsibility for education is most acute in the field of primary school administration. The Ministry of Local Government and Lands has responsibility for overseeing the operation of the autonomous local councils, which provide the buildings, furniture and supplies for primary schools. The Ministry of Education is responsible for professional education matters and for the operation of the Unified Teaching Service. The two Ministries clearly have an interest in joint planning--together with the Ministry of Finance--of the pace of expansion of primary schools, which is a matter of budgetary concern to both of them.

8.20 Our general view on the distribution at Central Government level of responsibilities for primary education stems directly from our acceptance of the importance of maintaining local democratic control over the primary school system, a point to which we return later.

8.21 Under present arrangements financial provision for the Councils' capital and recurrent education budget, apart from the important item of teachers' salaries, is on the vote of the Ministry of Local Government and Lands. An alternative arrangement of earmarked education grants for local councils from the Ministry of Education's budget might prove quite compatible with the principles of local autonomy, but establishing such an arrangement would create considerable turbulence and we see no strong grounds for chaning the existing system. There are significant advantages in the present arrangement of having educational development viewed in the context of the other concerns of the Ministry of Local Government and Lands, which has an overview of all infrastructure projects in relation to population distribution and movement. Furthermore, it would put a heavy additional burden on the administrative capacity of the Ministry of Education if it had to supervise spending by local councils, which the Ministry of Local Government and Lands would in any event be doing for development expenditures other than for education.

8.22 Continuation of present arrangements does however presuppose very close liaison in matters of planning and budgeting by the Ministries of Education and Local Government and Lands, in the following respects:

(a) Rate of expansion of primary schooling. In the light of available financial, teaching and administrative resources the two Ministries must agree with the Ministry of Finance and Development Planning on criteria for opening new classes or taking over unaided schools. There is a great need for both Education and Local Government and Lands to strengthen the capacity for planning educational development at the district level.

(b) Location of new facilities. Within the total programme, the allocation for each district or town in each time period has to be agreed. Policy guidelines should be worked out for use by local councils on how they should determine priorities for siting schools and new classrooms within the total quota they have been given.

(c) Buildings, furniture, equipment and materials. The Ministry of Local Government and Lands must depend on the professional advice of the Ministry of Education on schools' requirements for these items.

8.23 The Commission does not at this juncture see the need for a permanent liaison committee in view of the fact that both Ministries are represented on the National Committee on Educational Policy, which can provide a regular forum for top level discussion. However frequent contact on policy issues should take place between senior officers of the two ministries and in all cases draft policy circulars affecting administration and finance of primary education should be circulated to the other Ministry for comment and suggested amendments before being issued. An ad hoc planning committee should be formed by the two ministries on each occasion when the National Development Plan is being revised, and each year joint budget sessions should be held on the financial estimates for primary education.

8.24 *The Commission recommends that:*

The National Committee on Educational Policy should be the main coordinating body and should regularly review progress toward plan and policy implementation. (R-130)

The Rural Extension Coordinating Committee should coordinate activities in the area of extension. (R-131)

An officer in the Ministry of Education should oversee continuing educational and vocational studies. (R-132)

Technical education and vocational training should be coordinated by the National Technical and Vocational Training Board. The Board should meet more regularly and have a permanent secretariat. (R-133)

A national cultural council should be established to encourage learning through cultural and recreational activities. (R-134)

Cooperation between the Ministries of Education and Local Government and Lands is needed on expansion of primary education, location of schools, and requirements in schools of buildings, furniture, equipment, materials etc. All circulars on these matters should be subject of consulation, and joint planning and budget sessions should be held. (R-135)

ORGANISATION OF THE MINISTRY OF EDUCATION

8.25 The Ministry of Education has been reorganised recently, and it would be presumptuous for the Commission to suggest that there are simple solutions to the problem of organising the Ministry to perform its tasks more effectively. The key to effectiveness lies as much in the area of appointment of good personnel to the key positions, as it is a matter of organisational restructuring. This is to some extent outside the control of the Ministry because positions are filled by the Directorate of Personnel, which has to take into account the needs of other sectors of Government and the scarcity of experienced and high calibre Batswana administrators. We have been given to understand that the Ministry has not always had its fair share of competent administrators in the past. The position might be eased, but not solved, by casting the net of recruitment to the Ministry wider, and not relying so heavily on officers with a background in teaching. But there is no quick solution to the staffing problem.

Professional and Administrative Activities

8.26 There is clearly a broad distinction to be made within the Ministry between the professional side of the Ministry which is broadly concerned with the processes of education, and the administrative side of the Ministry which is concerned with inputs (money, teachers, etc.). One should not exaggerate this difference since the body on the receiving end of both administrative and professional direction is one and the same head or school. Most professional measures have administrative implications, and vice versa.

8.27 The chief professional officer in the Ministry should in our view occupy the existing post of Deputy Permanent Secretary, though we would prefer to see this post redesignated to emphasise that this is a professional post, which should always be filled by an educationalist rather than by an administrator on transfer from another Ministry (which is what the designation of Deputy Permanent Secretary could imply). Moreover we think it symbolically important for the education profession that their chief professional should have a distinctive professional title. We do not feel committed to any particular title, since the exact name is not the important thing.

8.28 Gathered under this chief professional officer there should be the following major groupings of services or activities. First, there are the senior officers responsible for policy and organisation for each level and type of education. These include primary, secondary, vocational and out-of-school education and teacher training. Not all of these officers need be of the same status and, in view of the limited numbers of senior posts and able administrators likely to be available, some functions could be grouped under one senior officer. The second group of activities under the chief professional officer should include professional support services for the schools such as curriculum and materials development, schools broadcasting, examinations and testing and careers guidance. Third, there are the inspection and advisory services which provide a two-way information channel between the Ministry and the schools.

8.29 The administrative wing of the Ministry should deal with resource provision, both to the schools and to the Ministry itself. It should include finance, buildings development, transportation, internal staffing and office services. An Undersecretary at present heads this wing, but the expanding scope of the Ministry's programmes and budget may in time make it necessary for this post to be upgraded to Deputy Permanent Secretary level, especially if, as seems logical, the Teaching Service were at some future time to be included in the schedule of responsibilities.

Planning

8.30 All senior officers and sections of the Ministry should engage actively in planning. There has been a tendency to regard planning as a specialised technical activity that should be left to the Planning Unit. As indicated below, we consider the role of the Planning Unit to be vitally important, but at the same time we would like to see a greater involvement in planning by others. All senior officers should be in the habit of analysing current trends in their area of responsibility, considering how Government policies can best be given expression and what resources are needed, exploring alternative courses of action, relating the development of their own sub-sector to the overall education plan and to developments beyond the education sector. In order to focus attention throughout the Ministry on policy and planning, the Commission suggests that the Ministry should establish a Policy Advisory Committee of senior officials under the Permanent Secretary's chairmanship, which would meet monthly, or more frequently when necessary, as for example at the time of preparing annual estimates or revising development plans.

8.31 Whilst all senior officers should engage in planning work, there is also need for a small specialised Planning Unit, able to devote itself full time to planning tasks, whose members will have specialised skills in data analysis, forecasting and cost analysis. The Planning Unit should provide the secretariat for the Policy Advisory Committee, coordinate preparation of the education plan, and be ready to help the different sections of the Ministry with analyses and programming. A large part of the Unit's energies at present are devoted to the administration of physical development programmes, work which could just as well be located in a separate unit and should not be allowed to divert energies from planning tasks. The Planning Unit should also serve as the Secretariat to the National Committee on Educational Policy and provide liaison with the Ministry of Finance and Development Planning. It should also stimulate research on issues concerning educational effectiveness and costs, in cooperation with the Faculty of Education at University of Botswana and Swaziland, the Institute of Development Management, Central Statistics Office and other bodies. Local staff should be trained in the techniques of planning. While some training will have to be outside Botswana, we feel that more use should be made of workshops and seminars within the country. Technical assistance in planning will have to continue for some time.

8.32 A separate need is to develop capacity at the district level for planning of educational development in each District. Whilst allocation of funds between districts should be the joint responsibility of ministries at the central government level, detailed planning of physical infrastructure for primary education, location of schools, take-overs of unaided schools and similar matters can be performed best at the local level, incorporating the views of the Councils and the District Development Committees. The Planning Unit at the Ministry of Education should provide assistance in such planning.

Curriculum Development

8.33 One of the major changes the Commission recommends is that a new unit be formed under the chief professional officer to group together professional educational services. This unit might be known as the Curriculum Development and Testing Unit, though it would in fact embrace other activities like materials development, research activities and careers counselling. We envisage that two or three more professional staff would be recruited at the outset, mainly in curriculum development, in addition to the staff of the Research and Testing Centre, who would serve as the nucleus of the staff for examinations, testing and guidance.

8.34 These new arrangements would have several major advantages. First they would permit close coordination and joint planning of several inter-related professional services in the area of educational content and method. This would mean that at the national level a much more concerted approach could be taken to the improvement of educational quality in the schools. A number of projects and activities that now operate separately (e.g. the In-Service Team, curriculum subject panels, etc.) could be brought into closer contact with each other and their activities coordinated. Second, by bringing the examination and testing function into closer relationship with curriculum development, testing would be made the servant of the school curriculum rather than its master, and examinations would come to reflect curricular objectives more closely. Third, the inclusion of careers guidance and counselling would help to ensure that aptitude testing and examinations were closely coordinated, that qualities needed in the labour market were more fully taken into account in curriculum design, and that careers work was given a proper place in the school curriculum.

8.35 The main priority concern of the new unit at first should be directed to improving education at the primary level and to overcoming the problems we identify with the current operation of the automatic promotion system (see paragraphs 4.60 to 4.64). Particular emphasis should be given to developing systems of checking on pupils' progress and producing curricular materials graded as to difficulty. Another priority is to improve the Primary School Leaving and Junior Certificate examinations.

8.36 In so far as the work of curriculum development involves syllabus revision and writing of new materials, the function of the curriculum unit would be to act largely as a coordinating and planning secretariat rather than as the main executive body. The Commission has been impressed with the way in which Botswana has used teachers themselves, often working with Ministry inspectors, through subject panels and subject associations to do the work of curriculum revision (see the Report of the Secondary School Task Force at Annex 5). The creation of a new unit should not remove the curriculum development function from teachers and inspectors, but should rather be seen as giving it new impetus and direction.

Inspectorate

8.37 It will be necessary for the secondary inspectorate and the primary level In-Service Team to work closely with the curriculum unit. Already one of the major functions of these groups is to work in the area of curriculum development, preparing new syllabuses and developing materials. They are moreover the channel for information and advice between the Ministry and the classroom where the actual learning process goes on. Their participation in the tasks of both curriculum development and curriculum implementation is crucial to success, and they will have a major part to play in testing new materials and obtaining feedback, and in training in-service teachers in the use of new approaches. The secondary inspectorate requires strengthening through the addition of new posts. Highest priority should go to to secondary inspectors or subject specialists in social studies, with emphasis on Botswana studies and incorporating aspects of Development Studies, and in practical studies to which the Commission gives great emphasis. Ideally posts should be added in agriculture, industrial arts and commerce. We have earlier recommended (paragraph 5.61) that a library advisor should be added to the team.

8.38 We do not see the need for a large primary inspectorate at the Ministry of Education, but we do suggest that there should be a professional officer at Headquarters with the responsibility of coordinating the activities of all primary inspectors in the field. This officer, together with the leader and any other members of the in-service team based in Gaborone, should cooperate closely with the Curriculum Development and Testing Unit on matters affecting the curriculum and syllabus at primary level. The role of the secondary inspectors should also be more broadly drawn to allow them to take more interest in developments at primary level, even though the main thrust of their efforts should be in the secondary schools. The lack of coordination between primary and secondary school curriculum in Botswana is a serious problem to which we have already drawn attention.

Schools Broadcasting

8.39 As suggested in chapter 4 the Commission believes that schools broadcasting has a valuable potential contribution to make to the improvement of primary education. This potential is not at present being realised because the Schools Broadcasting Unit has tended to operate in isolation from the rest of the Ministry; has had inadequate budget, accommodation or logistical support; and has lacked feedback from the field. The Broadcasting Unit should in future work closely with the proposed new Curriculum Development and Testing Unit to ensure that the broadcasting programmes reflect and reinforce the priorities and orientation of curriculum policy. Radio broadcasts could play a useful role in in-service training of teachers regarding curriculum changes. The Broadcasting Unit should rely on Ministry staff for feedback from the schools on their programmes. Since these have clearly been less effective than they should be, the Commission sees a choice for Government between putting schools broadcasting on a proper footing by provision of proper accommodation, more staff and financial resources, or closing the service down. We support the former course, but would not advocate continuation of the service in its present form.

Out-of-School Education

8.40 We have suggested that the Ministry should create a separate senior post for out-of-school education, not under the teacher training unit, which currently handles it. The officer concerned should be responsible to the chief professional officer for developing continuing educational studies on an evening and part-time basis and would be the senior officer concerned with the activities of the Botswana Extension College. He or she would be the main channel for Ministry contact with the Rural Extension Coordinating Committee and its Nonformal Education Sub-committee and with the National Cultural Council, when formed, as well as being responsible for the coordination with other Ministries regarding out-of-school education programmes.

This is a position which, particularly in its early developmental stage, will require a person of energy and creative insight. It will in no sense be a routine job. The Commission has urged the development of a network of out-of-school learning opportunities and the officer appointed to this post should play a leading role in planning and developing such an array of opportunities.

Unaided Secondary Schools

8.41 We suggest that the Ministry should appoint an officer to oversee and carry out policy towards unaided secondary schools, and the development of programmes of professional (and later financial) assistance to them. The officer concerned should maintain close contact with individual institutions, but his or her task would be greatly eased if the unaided secondary schools were to form some representative body with whom common problems could be discussed and proposals exchanged.

MINISTRY PROCEDURES

Systematisation of Ministry's Work

8.42 One of the main needs the Commission sees is to systematise educational administration to a much greater extent by making sure that procedures and responsibilities and basic information are codified and made generally available. To give some examples, every officer should have a clear specification of the duties attaching to his post and should know to whom he is responsible and for what. Guides for head-teachers and school supervisers should be prepared. Each teacher should have in his possession a copy of the syllabus for the level at which he or she is teaching and every school should hold copies of key documents. Current regulations applying to each level of education should be codified and made available as a manual in loose-leaf form which can be kept up to date by curriculation of revised sheets as necessary. Ministry circulars should bear serial numbers and an indexed list of those currently in force should be issued. The Unified Teaching Service should urgently compile a register of all teachers, both qualified and unqualified, serving in Botswana's schools, as a basis for planning teacher supply and preparing annual estimates for primary education. With a teaching force of under 5 000 teachers it should be possible to construct a proper system of teachers' records within a few months. The Ministry should issue a public report each year, which should appear within nine months of the end of the school year to which it refers.

8.43 The purpose of such systematisation and codification is to increase efficiency of operations by making information more widely available and enabling more decisions to be made by school heads and education officers in the field. If officers understand better the limits of their own discretion, and have guidance on the procedures to be applied in particular cases, it becomes unnecessary to refer decisions to higher authority. A conscious and continuous effort must be made in Botswana to encourage educational decisions to be taken as near as possible to the point where they become effective.

8.44 One area where such systematisation is already in effect is educational statistics. The Commission was very impressed by the range and quality of educational data collected and published in Botswana. Ironically, perhaps because educational statistics are collected by the Central Statistics Office rather than by the Ministry itself, these data are very little used. They should in fact provide the information base for many policy and administrative decisions. A special effort should be made to improve liaison between the Central Statistics Office and educational administrators, so as to ensure that statistical data are available in the most useful form and to acquaint Ministry and local council staff with the range of data presently collected and their uses in policy making. It would also be helpful if the Central Statistics Office were to assign a separate Senior Statistical Officer to deal with education statistics rather than a single officer for both education and health statistics. A fulltime officer could work with Ministry officials to produce many useful analyses of the data already gathered.

Financial Management

8.45 Financial management in education could be improved. It will be increasingly important in the coming years to review recurrent expenditures in relation to overall policy and plans. Although the education sector will be allowed one of the highest rates of increase in its recurrent budget during the forthcoming plan period (Fourth National Development Plan), general financial constraints will affect all Ministries, including education. There are a number of factors that will tend to increase costs: rapidly expanding enrolment, a more mature and better qualified teaching force, inflationary forces and critically important measures to improve the quality and effectiveness of education. It will be necessary to review educational expenditures with increasing care in order to determine which expenditures (development and recurrent) will make the greatest contributions to achievement of educational objectives. Until now financial management has been interpreted mainly in an accounting sense, which is indeed one important aspect of it. But the term implies much more than checking misspending or overspending. It involves consideration of objectives and the costing of alternative ways of achieving them.

Potentially therefore the budgetary process is a powerful tool for the review of policy and should be closely related to planning. However it has not been conducted in this way in the Ministry of Education hitherto, partly because of critical staff shortages and partly because the way the estimates were prepared and presented made it difficult to consider expenditures by programme. The Commission notes with approval recent moves toward differentiation of expenditure by major programmes in the Education Estimates. The changing structure of the estimates for the 1976-1977 financial year represents a step in the right direction. It is still not possible, however, to determine how much is being spent upon primary education, secondary education or teacher training without laborious analysis of individual expenditure items school by school and vote by vote. Important expenditure items have been aggregated under 'Education General'. The process of restructuring the estimates must be completed to make it possible to calculate unit costs, to compare them between different levels and types of education, and to see how they are changing over time.

8.46 *The Commission recommends that:*

The professional wing of the Ministry should be headed by a professional officer at Deputy Permanent Secretary level, and the post should be redesignated. This wing should incorporate the officers responsible for the various levels and types of education, for professional education services and for the inspectorate. (R-136)

The administrative wing should cover resource provision to the schools and organisation/staffing of the Ministry of Education. (R-137)

A Policy Advisory Committee, composed of senior officers and serviced by Planning Unit staff should be established in the Ministry of Education and should meet regularly. (R-138)

All senior officers of the Ministry of Education should engage in planning work but there is need for the existing specialised Planning Unit. This should be freed as far as possible from executive tasks and should concentrate on analysis, forecasting and costing; liaison within and outside the Ministry; and assistance to planning at the local level. (R-139)

The new curriculum development and testing unit should be formed to undertake curriculum planning, development and evaluation. (R-140)

The secondary inspectorate should be strengthened by the addition of subject advisers in social studies, pre-vocational areas, library development and careers advice. The inspectors, and their counterparts at primary level, should work closely with the curriculum unit to promote improvement of quality in their respective spheres. (R-141)

Schools broadcasting must be more strongly supported; should work in close conjunction with other professional services in the Ministry and pay more attention to evaluation of results. (R-142)

Officers should be appointed in the Ministry of Education for out-of-school education and links with unaided (secondary) schools. (R-143)

Administrative procedures and responsibilities require codification to assist delegation of authority. (R-144)

Greater use should be made of educational statistics and closer liaison should be established between the Central Statistics Office and the Ministry of Education. (R-145)

Improved financial planning should be developed, to include the restructuring of the education estimates to make caluclation of unit costs easier. (R-146)

EDUCATIONAL MANAGEMENT AT THE LOCAL LEVEL

The Concept of Partnership

8.47 The relationship between the Ministry of Education and the Ministry of Local Government and Lands was discussed above in paragraph 8.19-8.23. That discussion took as its starting point the principle of local management of the primary school system. The Commission considered carefully the arguments for making changes in the management structure to bring primary schools under the direct administration of the Ministry of Education but decided not to recommend any major modification of present arrangements. The national principles of democracy and self-reliance suggest that as far as possible schools should be under the supervision and management of elected bodies and closely linked to the local community. The Commission doubts whether efficiency of management (the principle of development) would be better promoted by administration of schools from Gaborone, and notes that equality of provision (the principle of unity) can be achieved through the present grant system and the exercise of the powers of the Unified Teaching Service. Pressure for Government takeover could however become powerful once more if there were any serious deterioration in local management of the schools or if Government failed to ensure that resources were faily distributed. Councils must therefore prove themselves capable of fulfilling efficiently the role with which they are entrusted, and Government must assist them to do so.

8.48 Essentially the present system is based on the principle of partnership between the Ministry of Education on the one hand, which is entrusted by law with the responsibility for education policy, and which works largely through District Education Officers as its field representatives; and the district councils on the other hand, which are designated as local education authorities responsible for primary school management in their areas. The Ministry of Education has in fact the legal powers to control the education system through the appointment of teachers, through inspection, and if necessary through closure of schools. But to exercise these powers effectively it must, as already discussed in paragraphs 8.19 to 8.23, cooperate with the Ministry of Local Government and Lands which supervises the financial affairs of councils. The Ministry of Education must have competent field representatives who will maintain effective liaison with the councils in carrying out their professional responsibilities.

8.49 At local level the key to the smooth operation of the present system lies in the following:

(a) a clear definition of the powers and responsibilities of the District Education Officer vis a vis the Councils and a cooperative relationship between them;

(b) a clear definition of the respective roles of the Councils and the Unified Teaching Service in regard to teachers;

(c) effective personnel serving as district education officers and education secretaries.

8.50 As regards the relationship between the District Education Officer and the local councils, the Commission notes that in many cases this is already working smoothly. It would however be helpful if a statement setting out the respective functions could be agreed between councils, the Ministry of Local Government and Lands and the Ministry of Education. The Commission suggests that it might cover the following points:

(a) The District Education Officer is the local representative of the Ministry of Education and he will act as the channel of communication between the Ministry and the local council on professional matters, subject to the proviso that the council should in exceptional circumstances be free to voice dissatisfaction or complaint about the education officer through the Ministry of Local Government and Lands.

(b) The District Education Officer should continue to have right of access to council schools to inspect them on behalf of the Ministry or to supervise teachers, and should be furnished by the council with any information needed to help him in his duties.

(c) Inspection reports to the Ministry of Education on the conditions in the schools should be copied to the councils, and the council should be free to comment on them.

(d) The District Education Officer should report to the council on any matter within his competence at the request of the council.

(e) Communications from the Ministry/District Education Officer to the schools which impinge on the council's management functions should normally pass through the council.

(f) The District Education Officer should continue to participate in all meetings of the council's education committee as an ex officio member with the responsibility for interpreting Ministry policies to the council and for communicating to the Ministry any matters that call for action.

Councils and the Unified Teaching Service

8.51 With regard to the relationship between the Unified Teaching Service and councils on the deployment of teachers, the Commission is pleased to note that satisfactory working arrangements appear to have been developed covering the following points:

(a) Education Secretaries are for the time being acting as agents of the Unified Teaching Service in personnel matters.

(b) While the Unified Teaching Service employs teachers directly, it in fact deploys them through Education Secretaries and transfers, etc. are normally made with council agreement.

It seems desirable for this working arrangement to continue and if found satisfactory by all parties it could be formalised. This would obviate the necessity of appointing a separate cadre of field personnel officers for the Unified Teaching Service with the possible danger of lack of coordination between them and the education secretaries. We see great merit in keeping the provision of teachers and material resources to primary schools in the same hands. Any code for cooperation between the Unified Teaching Service and councils should specify respective responsibilities regarding travel, housing, etc. for teachers; and should make explicit on the one hand the right of teachers to appeal directly to the Unified Teaching Service against decisions or actions taken by Education Secretaries acting its agent, and on the other hand the responsibility of teachers to take instructions from council education committees in matters pertaining to the management of the schools where they serve.

District Education Officers and Supervisors

8.52 The District Education Officer as the representative of the Ministry of Education must be a person of high calibre with a good professional grounding to enable him to exercise professional supervision over schools and teachers. At the same time he needs administrative capability, and qualities of diplomacy in his dealings with the council. Unfortunately, in many cases it has not been possible to fill these posts with personnel of the required standing. The Commission recommends that over a three year period these posts be filled at the Education Officer level. The Commission considers that the upgrading and filling of District Education Officer posts has the highest priority, for the proposals we make for the improvement of primary education depend on competent professional field officers. Education Secretaries to the Councils, at least in the larger districts, should be of equivalent status; but although it will be advantageous for them to have a background in education, it should not be insisted on in all cases, for their duties are largely administrative.

8.53 Whilst one aspect of the District Education Officer's responsibilities is concerned with liaison with local councils, he should also be seen as the director and coordinator of professional services to the schools. In large districts he might be assisted by a number of school supervisors (a term we prefer to that of inspector at the primary level) and everywhere the teacher advisers responsible for the oversight and in-service training of probationary, national service and other untrained teachers would be under his direction. All arrangements for in-service training courses, teaching practice by college students, field trials of curricular materials, etc.--whether initiated by training colleges, the Ministry of Education or at district level--should pass through him.

8.54 We believe that the cadre of school supervisors, acting as assistants to the District Education Officer in carrying out the above duties needs to be very greatly strengthened, both in numbers and quality. Bearing in mind their multiple duties, and the fact that distances between schools are great, we consider that the cadre should be brought up to a strength which would provide one District Education Officer/supervisor for every fifteen schools. This would imply a need for twenty four staff to serve the existing primary schools in 1977, compared with a present total of nineteen. Adequate transport is necessary to permit the conduct of school visits.

8.55 *The Commission recommends that:*

> *Management of primary schools should remain with local councils, with the Ministry of Education being responsible for educational policy and professional matters. (R-147)*
>
> *District Education Officers should be appointed who are at least of education officer rank. (R-148)*
>
> *A statement setting out the respective roles of the District Education Officer and local councils/education committees, and procedures for cooperation, should be issued. (R-149)*
>
> *The present cooperative arrangements between the Unified Teaching Service and local councils whereby council secretaries act as the local agent of the UTS should be formalised and their respective roles should be set out. (R-150)*
>
> *District Education Officers should be coordinators of professional support services to schools and teachers in their areas and they should be assisted by a cadre of supervisors such that the ratio of DEO/supervisors to primary schools is at least 1:15. (R-151)*

CAREERS IN EDUCATIONAL ADMINISTRATION

8.56 As in the case of the teaching profession, which we have discussed in chapter 6, the provision of a well constructed career ladder is necessary if educational administration is to attract good recruits. Most entrants will in fact come via teaching relatively early in their careers, though there should be some exceptions to this pattern, as follows:

(a) The possibility for experienced primary school headmasters to become school supervisors on promotion should exist--they would enter the old Assistant Education Officer grade (recently renamed, confusingly in our opinion, 'Inspector of Schools, Grade II').

(b) Senior secondary school and training college staff should be able to enter the administration in various capacities in mid-career.

(c) There will be openings for trained professional educationists, even with a minimum of actual teaching experience, in the Curriculum Development and Testing Unit.

(d) There will be a place in the non-professional wing of the Ministry for people with training in economics, finance, administration, personnel work, etc.

Those involved in the inspection and supervision of schools or in in-service work must of course have had considerable teaching experience.

8.57 In drawing up career patterns for educational administrators, we believe three principles should be observed. In the first place the phrase 'or equivalent' should always be attached to any specification of qualifications for entry to a grade. We do not believe that there should be any absolute bars imposed to promotion to any level for the outstanding person who has the qualities and experience required for the post but happens not to hold a degree or other qualification normally required. We hope that when the detailed schemes of service are drawn up for the education officer cadre, the qualifications specified for entry to posts of assistant education officer and above will be written in terms of a degree being the 'normal entry requirement' rather than a mandatory one. Second, the qualifications in question should be specified in terms of professional educational qualifications of relevance to the job, and not general academic certificates. Third, where some qualification is a normal entry requirement to a grade it should be possible for a person not holding this qualification to obtain it through study on a part-time basis. The Ministry should facilitate such part-time study.

8.58 More specifically we have noted the recent proposals of the Public Service Grading Committee regarding the Education Officer cadre, and have some observations to make. First, it does not seem appropriate to use the designation 'Inspector of Schools' for primary school supervisors. Rather 'Inspector' should be reserved, as hitherto, for the secondary level. At primary level we suggest the term 'supervisor' be used, with the District Education Officer at Supervisor Grade I level as the promotion post. So far as the 'Education Officers' are concerned it is unclear whether the proposed four grades (of Assistant Education Officer, Education Officer, Senior Education Officer and Principal Education Officer) in fact represent a hierarchy of personal statuses or of established posts; and if the latter, how the posts will be filled if personnel with the requisite length of experience are not available. This will doubtless be clarified in the schemes of service to be issued. Third, in so far as the posts are managerial posts (schedule heads, etc.) we hope the requirement that entrants should hold university degrees will not be insisted on. Of course, for professional specialists in areas like educational testing an appropriate professional qualification could reasonably be stipulated.

8.59 Finally we emphasise the need for training for educational administration. Because the scale of operations in Botswana is so small, it will be necessary to rely more on training through supervised work than in other countries where it would be economical to mount formal courses. However, we think that regular courses in administration of up to four weeks duration should be organised by the Ministry in conjunction with the Faculty of Education at the University, the Institute of Development Management, or other appropriate bodies. These should be held for education officers and supervisors and for headmasters, particularly those who are newly appointed. They should be supplemented by courses overseas for selected personnel of particular promise.

8.60 *The Commission recommends that:*

A career structure in educational administration should be developed. (R-152)

Entry qualifications to any particular grade should allow flexibility and recognition of equivalences. Part-time professional studies should be available to enable officers to obtain any qualifications which may be specified for promotion. (R-153)

While entry to educational administration should normally be via teaching fairly early in a person's career, possibilities should also be available for non-teachers and for experienced teachers to enter this work. (R-154)

Short training courses should be mounted in Botswana in educational administration and supervision, with more extended courses in other countries for selected persons. (R-155)

CHAPTER 9

Implementation

9.01 In this Report the Commission has made a great many specific recommendations for the development and improvement of education in Botswana. To help the reader we have included a list of our recommendations in abbreviated form at the end of this chapter. We recognise that it may be difficult, however, from a quick persual of our recommendations, to grasp the underlying ideas which inspire the specific proposals. It may therefore be helpful if we summarise the overall strategy of educational reform into which the particular recommendations fit.

OVERVIEW OF THE STRATEGY

9.02 We have had to review the present education system of Botswana in three respects. First, we had to ask about the values and aspirations that Batswana hold and the kind of society they are trying to build, and whether education reflects and reinforces these values or not. Next it was necessary to see education in relation to the present and future economic, social and political framework of Botswana, paying attention both to the present 'fit' between education and other developments in the country and to the relevance of the structure and content of education to the future needs of society. Finally, we had to consider the structure and functioning of the education system itself, examining its internal strengths and weaknesses and its potential for growth. Any proposals for change must start from the system that actually exists and its capacity for change.

9.03 The conclusion we have reached from our examination of these factors is that there are many weaknesses both in the present education system, and in the fit between education and society; but that these are due at least in part to the very rapid progress of Botswana since Independence. Many of the internal problems of education reflect the great expansion of enrolments and of the teaching force in a short period. Similarly it is the rapid growth of the economy and the extent of localisation that have highlighted the severe manpower shortages and have created the present imbalance between demand and supply of educated people. Education has not been wholly unresponsive to the demands of the economy. Indeed it is the attempt by the education system to expand at the upper levels faster than the supply of adequately qualified pupils or teachers allowed, that has been one of the main causes of difficulty in the schools and colleges. Similarly pupils and their parents have been very responsive to the wide income differentials paid in respect of different levels of education, and have concentrated their efforts on gaining admission to the courses leading to the greatest earning opportunities, promotion prospects and prestige.

9.04 The policy which has so far been pursued, with its emphasis -- particularly in terms of capital development -- on the expansion of the secondary and upper levels of education, has had a great measure of success in terms of localisation of many senior posts in the civil service and elsewhere. But while it may have had some justification in the past, it does not provide a viable basis for future development.

9.05 This is true first in the sense that the longer such a stategy is pursued, the more social development will diverge from the ideal of *kagisano*, towards which Botswana is striving. A system that selects just a few, and then gives them an expensive education, with high rewards at the end, is bound to be socially divisive. It is self-evidently contrary to the national principles of democracy, unity and social justice. We also believe that it may retard development by over-investing in very expensive secondary and higher facilities and yet neglecting to develop the potential of the majority of Batswana. It leads eventually to a society which is polarised between rich and poor, urban and rural, well-educated and semi-literate, a privileged minority and an underprivileged majority.

9.06 Second, it puts the supply of education and the demand for it on to a collision course. A system which stresses the need for expensively produced and highly paid 'high level manpower' generates enormous pressures from below to obtain coveted places in secondary and higher education. These levels can safely be expanded so long as the scale of the system is small and the employment needs-- replacing expatriates and expanding government services-- are high. But experience elsewhere in Africa suggests that sooner or later the costs of expanding secondary and higher education and of employing more and more graduates from these levels on high salaries become too great. Educational expansion therefore has to be slowed down or even halted. This tends to happen just when the numbers seeking entry to upper secondary and higher education are growing rapidly. The result is a frustrated queue either at the entry point to secondary and higher education, or (if Government bows to the pressure of private demand and creates more places than it believes justified) at the gate to employment. This sequence of events has been witnessed in country after country in Africa in the post-Independence period, and *it is already clear that Botswana is heading for exactly the same difficulties unless the strategy of development is changed.* For example, the Fourth National Development Plan (NDP IV) envisages that growth of Form IV enrolment should cease in 1979 and Form 1 enrolment should stop growing in 1980, *even though the numbers completing Standard 7 are expected to rise by 70 percent between 1977 and 1979.*

9.07 The possibility that a poor country like Botswana, in urgent need of raising the productivity of its population, might have to cut back on the provision of educational opportunity will be a repugnant idea to those who believe the future of the country lies in developing the potential of its citizens. Can one really contemplate a government saying to its people "We are sorry, we cannot afford to let you develop your knowledge and skills:

the country does not need them"? Unfortunately the answer to this question must be, in some circumstances, "yes". If education is unduly expensive, if pupils are learning inefficiently in school and acquiring only low levels of competence, if when they enter the job market they have to be paid more than they contribute to production, if Government has to bear from limited tax revenues the whole cost of the education and also the responsibility for employing and paying those who complete school, then it will be bound to restrict educational opportunity.

9.08 This is in fact the position in which Botswana could find herself. If present structures of educational costs and finance, and present income differentials remain unaltered, then the country might be unable to afford to educate and employ all those coming forward for secondary education. The experience of other African countries suggests that a manpower shortage can quickly turn into a surplus. They too have passed through Botswana's current phase in which there are more jobs and places on higher courses than qualified applicants. This has been followed in a matter of years, by employment difficulties for those with secondary and higher education. Because of Botswana's excellent record of economic growth and buoyant government revenue, the transition from manpower shortage to manpower surplus is perhaps taking place over a longer period than elsewhere, but the underlying trend is the same. Unless the structures of education, incomes and employment can be changed, which is the solution we advocate, a Government has only two real options. The first is to restrict educational growth to what high level manpower requirements indicate. This is the financially prudent, but politically unpopular, course of action. The other option is to let education continue to grow, with the threat of financial collapse and educated unemployment. Although Botswana's Plan opts for the former of these two approaches, we note that it has proved politically very difficult to halt secondary education expansion in other African countries in similar circumstances. Despite Government's present intentions, there is an obvious danger that Botswana too will follow down the well-trodden path from manpower shortage to unemployment of secondary school leavers and ultimately of university graduates.

9.09 But there is an alternative strategy that could be employed. It involves moving away from the present costly pattern of heavily subsidised full time secondary and higher education for small numbers of Batswana and reducing the gap in standards of living between people with different levels of education. In this way Botswana could afford both to educate and to employ a much higher proportion of her people. We believe that Botswana may be in a better position than most countries to adopt this alternative strategy. This is first because in coming 'late' to independence and economic growth she has the chance to observe and learn from the experience of her sister African countries; second because a social class system is not yet firmly entrenched and may be prevented from developing; third because the Government is already committed to finding ways of preventing a divided society from coming into being; and lastly because Botswana's economic growth rate and the help of donor agencies should provide her with a margin of resources to introduce a new strategy in an acceptable way.

STRATEGY IN RELATION TO BOTSWANA'S NATIONAL PRINCIPLES

9.10 A new strategy for educational reform must be based essentially on *kagisano* and the four national principles of Botswana. It is important to note that *kagisano* is a broader concept than economic development, and we believe that education must serve the wider purposes of social harmony, democracy, self-reliance and unity as well as of economic growth, crucial as this last objective is. The social as well as the economic goals of Botswana must be kept firmly in mind, which is why we stress throughout this Report the importance of social relationships, behaviour and attitudes in education. If moral, cultural and aesthetic values are neglected, the prospects for Botswana will be bleak.

9.11 According to the principles of *democracy* and *unity* we believe that Botswana must develop an education system that is comprehensive and unified. Hitherto education has been stratified and hierarchical, and has been associated with exclusiveness and privilege. Some forms of education have had disproportionate attention and resources from Government, with some schools having much better facilities and enjoying greater prestige than others. Opportunities in the rural areas have been worse than in the towns. The socially and economically privileged have had better chances of getting a good education, and education in its turn has conferred privilege in terms of better jobs and higher status. The aim of policy should be to make the first years of education available to everybody on as equal a footing as possible. This involves making primary and later junior secondary education universally accessible, of a more uniform quality, and free; and it means offering to the adult population opportunities for acquiring useful knowledge and skills. Places in the upper levels of the education system will have to be rationed, because of their fewness and comparatively high cost. What is needed here is equivalence of conditions and of costs for students in different types of courses (e.g. vocational and general) at the same level, and an adjustment of the costs and rewards associated with these levels of education so that they do not confer undue benefits on those who attend them. Those who are already at work should have the opportunity to take the same courses part-time. In planning education the authorities should have the needs of the whole population in view and should treat out-of-school education, vocational courses, community schools, the brigades, evening classes and the rest as worthwhile supplementary or alternative parthways, *not* as inferior ones, to secondary schools and universities. If, for financial reasons, equal treatment cannot be given to all, at least, education charges and subsequent incomes can be made far more equitable.

9.12 The ideal of *unity* has also led us to put great stress on the national culture, and on the role of education in inculcating in the citizens of the country a greater sense of national identity and pride. We think that the national language should play a more prominent role in education.

9.13 The ideal of *self-reliance* inspires many of the proposals in this Report. Self-reliance implies first of all that Botswana should not allow herself to become over-dependent on foreign aid or expatriate help and should actively press ahead, as the availability of manpower makes it possible, with plans for localisation. It also involves putting local authorities, communities and educational institutions in a position to play a greater part in the management of their own affairs. It means encouragement for self-study and part-time education, and providing opportunities and incentives for people to pursue learning on their own.

9.14 The principle of *development* requires that education conserves resources and makes people productive. The prime need is to find ways of making education less costly to the state, and at the same time more productive in terms of the economic and other contributions its graduates make. The costs and benefits of education to the individual must be brought more into line with those for the society. Specifically we suggest that a lower-cost junior secondary education be developed; that students in full time upper secondary or higher education be required to pay more, in fees or service, for their education; and that income differentials associated with successive levels of education be reduced. At the same time the quality of education at all levels needs to be improved and should be much more closely monitored. We suggest various ways in which this might be done -- improved teacher quality and lower turnover, curriculum improvement, examination reform -- but the process will not be quick. We also suggest ways of improving the relevance of education to life in Botswana, by associating education more closely with community concerns and integrating it as far as possible with the world of work.

9.15 The strategy of educational development which we propose is built upon these national principles and involves a decisive shift in emphasis from the almost exclusive preoccupation with the production of high level manpower. Instead the emphasis should now be on realising the potential and abilities of a much broader spectrum of the population through more widely distributed educational opportunity, and on a greater contribution by education to social justice.

9.16 The first priority must be to make primary schooling accessible to the whole population of primary school age, by extending public schools into all areas, developing schools to Standard 7, and abolishing school fees. Botswana has almost achieved this already, but the task needs to be completed. As is evidenced by the survey we conducted, the education provided in primary schools needs to be improved, and resources more fairly distributed. The main requirement is to raise the quality of teachers. The only viable means the Commission sees of doing this in the short term -- and a short-term solution is needed if the learning and working potential of the present generation of school children is going to be realised to any significant extent -- is to introduce national service for Form V leavers. The alternative appears to involve recruiting teachers inadequate to their task. Our solution is a stop-gap measure to buy time until secondary school leavers are available and apply in great enough numbers to become permanent primary school teachers. We have also suggested that Government urgently expand its programme for building and equipping primary schools, that the curriculum put more emphasis on basic subjects, and that a thorough system for assessing children's learning progress be instituted.

9.17 We cannot emphasise the priority claim of primary education too strongly. It will be wasteful to expand secondary and higher education programmes for young people who have lacked a proper foundation in primary school. We see no real hope of a major improvement at the upper levels while the lower levels of education are in their present weak state. In the short run our suggested approach certainly involves some postponement of manpower self-sufficiency in other specialised occupations, for it temporarily diverts Form V leavers into primary teaching. In the longer term however all forms of occupational recruitment will benefit if all children are more soundly educated at the primary level.

9.18 As an important complement to the extension and consolidation of primary education, opportunities for learning out of school should be developed. A bigger share of the total resources for education should go to providing facilities and courses which will serve those at work, employed or self-employed. Their educational needs -- whether concerned with job skills, literacy, health and family care, academic qualifications, civic participation or cultural interests -- deserve greater recognition.

9.19 At post-primary level the challenge is two-fold. The secondary schools must improve the quality of the education they impart, but at the same time a way must be found to make post-primary opportunities available to a higher proportion of the age-group. In the immediate future the first of these tasks should be emphasised, bearing in mind that at least until the end of 1979 the numbers leaving primary school will not grow fast. In the longer term of course, improvement of secondary education must depend largely on a better quality of entrant from improved primary schools. Something can be done in the short term through revised selection and bursary procedures to ensure that a higher proportion of the best candidates are enabled to attend, but the main emphasis must be on efforts to reduce the damaging high turnover of teachers. Early attention to improving the Junior Certificate examination is essential, and a start must be made in orientating the content of the curriculum towards Botswana society and culture, towards community concerns, and towards practical approaches.

9.20 From 1980 onwards a more intense pressure for entry to secondary school will be experienced, as successive waves of the higher post-1973 primary intakes reach Standard 7. The Commission does not consider that it will be possible or desirable to attempt to cater for these expanded numbers through expansion of the existing type of secondary school, which is too expensive in terms both of recurrent and of capital cost. But if a new form of junior secondary education can be provided at moderate cost, then we think such a development would be desirable both on social and on manpower grounds. For reasons of cost, equity and acceptability, the new type of school would eventually have to be a common school for all, replacing the present secondary schools at the junior level. It could not be successful as an inferior alternative, parallel to the existing schools.

9.21 This is the background to our proposal that in the 1980s Botswana should restructure her education system, by shortening the primary stage to six years and creating a new junior secondary stage of three years. Gradually, and at a pace consistent with the availability of teachers and finance, junior secondary education should be provided for every Motswana up to the end of the ninth grade. In Appendix D we set out an illustrative scheme showing the steps by which this could possibly be achieved. By this means the difficulties at present being experienced by primary school leavers on account of their extreme youthfulness might be greatly alleviated for none would leave school before fifteen or sixteen years of age. A new lower secondary school would be created, more modest in facilities and costs than the present secondary schools. In many instances the method of expansion should be to develop the existing unaided secondary schools into publicly supported institutions, thus ending the current gap in standards -- and in private costs and benefits of education -- between the self-help schools and government supported ones.

9.22 After the junior secondary school would follow a variety of learning opportunities at the senior secondary stage of education. Full-time courses of three years up to senior certificate level would be offered in senior secondary schools (today's secondary schools would offer courses only at this level) but they would be complemented by a wide variety of other opportunities for full or part-time study or training. The automatic preference for a senior secondary and university full time course would no longer apply, for the alternative attractions of earning and part-time study, or training through the brigades, would become strong. Moreover those who studied full time in senior secondary school would be expected to serve the nation for two years before proceeding to university or other full time study. University students in their turn would contribute more to the cost of their studies by fee-cum-loans schemes or through service obligations. There would thus be a variety of routes to gaining qualifications, and all students entering higher education would engage in productive work en route. Whilst excellent performance in studies or training would still be a major factor in selection to jobs, the possession of a certificate at a particular level would give less of a pay differential than at present.

9.23 The essence of our proposals is, then, to create a more open education system in which learning opportunities are *accessible to all,* regardless of geographical area, individual wealth, age or previous educational attainment. The system should also be open in the sense of openness to cultural influence and practical concerns of the neighbouring community and society at large. Separatism, exclusiveness and privilege -- enemies of *kagisano* -- should be banished from Botswana's education system.

9.24 Once again however we must return to the link between education and productivity, for the possibilities of educational expansion and development depend on this. Education must be effective in increasing the competence and productivity of individuals, in terms of their ability and willingness to contribute more in effort to Botswana than they seek to receive in reward. Moreover the cost to the state of educating a Motswana and providing work for him or her must be held in check. Bearing in mind that education costs consist largely of salaries, this means that an appropriate pay structure and fair income policies are the key to success.

TIMING AND PRIORITIES

9.25 We turn now to a complete statement of our specific recommendations and the phasing of their implementation. As we have explained, these arise out of our broad view of the strategy of educational development that should be followed. In so far as the strategic approach is found acceptable, be believe it will be necessary to adopt these or very similar policies.

9.26 Some of our proposals are self-contained and could be considered in isolation. But to a large extent our policy recommendations are *interdependent parts of a total programme,* and if key elements of this were rejected it would not necessarily make sense to adopt others. This is particularly true of our proposals for restructuring the education system. For example, we would not advise reducing primary school to six years unless our proposals to improve staffing and to tackle the problems of automatic promotion were acceptable; for a six year primary school presupposes higher quality of primary education. Our proposal for a common lower secondary school of three years would be undermined if a handful of schools operated at both junior and senior secondary level. Only if costs and staffing ratios are kept at moderate levels, and if communities contribute to the cost, would the expansion of secondary education be advisable. It is an integral part of our approach that pupils in selective stages of education contribute more, financially or through service schemes, to the cost of their education. Above all, expansion of post-primary education without restructuring of the education system and of the incentive structure might well prove damaging.

9.27 At the end of this chapter we present a summary list of all our recommendations. In setting out our detailed recommendations, we have tried to arrange them in a form which would be convenient at the stage of consideration and implementation. We would envisage that once the stage of consultation and decision at the highest levels had been completed, it might be necessary for Government to assign to some group of officers, possibly the Ministry of Education Planning Unit which also services the National Committee on Educational Policy, responsibility for ensuring that the necessary follow-up action were taken. This would be essentially a coordinating task, because the drawing up of specific schemes and their implementation would have to be undertaken by individuals or groups at national, local or institutional level.

9.28 In listing our recommendations we categorise them in four ways:

(a) By chapter and paragraph of the Report, for ease of reference.

(b) Those recommendations which are starred (*) are the ones we consider to be key strategic recommendations.

(c) We have indicated the estimated length of 'preparation period' required from broad acceptance of the principle of the recommendation to the start of implementation. This preparation period is required for programming, for putting the policy decision into operational terms -- writing new regulations, preparing manuals, designing courses, working out administrative procedures, securing allocation of funds and so forth. There are four categories here:

' 0-12' : preparation period of up to twelve months (hopefully, in many cases, in time for start of 1978/79 financial year)

'12-36' : preparation period of up to three years, (in many cases by 1980)

'36+' : long term preparation period lasting beyond three years (i.e. beyond 1980)

- : no preparation required. In some controversial areas the Commission recommends 'no change'.

(d) We have in the right hand column indicated how quickly we think completion of implementation can follow programming by marking the recommendation in one of four ways:

'I' - immediate

'S' - short-term implementation of up to two or three years

'ML' - medium to long-term implementation period of over three years

'C' - continuing implementation.

In general we have assumed that where an officer is to be appointed, a regulation introduced, a revised procedure instituted, or a manual issued, implementation can follow immediately on conclusion of preparation. Where a new institution is being formed, or a programme being introduced to tens or hundreds of schools, implementation will be at least a short-term operation and may, in the case of far-reaching structural reforms take as much as a decade and be classified 'medium to long-term'. The 'medium to long-term' category is not any less important than the 'immediate' or 'short-term'.

Phasing of Implementation

9.29 It will perhaps help the reader to grasp the significance of our recommendations and their consequences for the system, if we present a brief sketch of the prospective state of the education system at different future periods if this Report were adopted. Three successive phases of educational development are implied, as follows:

1. The Short-Term, to 1979

9.30 The short-term, covering the period up to 1979 when the next revision of the National Development Plan takes place, will be mainly *a time of preparation* , including the necessary administrative reorganisation, planning of medium-term developments, determination of long-term strategy and the undertaking of detailed work on medium and long-term curriculum and examination changes. The establishment of capacity for curriculum development, evaluation and testing during this period is of great important. Time will be required for public discussion and government deliberation on the recommendations of this Report and on such other additional or alternative proposals as may be made. Preparation of new administrative measures in such areas age of entry, examinations, bursary and fees policy, mounting of part-time courses, will have to be worked out for possible introduction in school years 1978 and 1979.

9.31 Whilst many of the changes we advocate will only make their mark on the learning situation in the classroom rather gradually, there are a number of important suggestions for the reform of primary education which would make an immediate difference and which we hope will be treated with urgency. These are the primary school equipment and building programme (recommendations 11 through 13) and more especially the proposals concerning a national service for Form V leavers and the probationary year for teacher trainees. Primary school enrolment is expanding rapidly and, in the absence of remedial measures, the numbers of poorly accommodated pupils and of untrained and ill-educated teachers will grow. We hope it might be possible to introduce the probationary year and national service by Form V leavers in 1979. If action on this can be taken we are hopeful that by 1980, although the primary system will still be under great pressure, some improvement will already have been experienced.

9.32 In terms of physical expansion and development of the system, programmes already set in motion in cooperation with donor agencies --for primary school development, for secondary school expansion and teacher training development--will be going ahead in this period. In so far as any additional capital resources become available for short-term development, the Commission recommends that these be concentrated on the primary sector, which is bound to be growing rapidly over the period up to 1979. No additional government secondary schools of the present type, beyond those for which commitment is already made, should be built.

2. The Medium Term, 1979-1985

9.33 This period coincides with National Development Plan V (1979-82) and National Development Plan VI (1982-85). Most of the Commission's recommendations, if acceptable, can be gradually introduced during this phase, but naturally the full implementation of structural and curricular changes, and the reorientation of the system to reflect fully the national principles, can only be effected over a longer period. The major priority during the medium term will continue to be the strengthening and improvement of the primary school base of the system, through proper housing of schools, improved teacher supply, revised curricula and a strengthened inspectorate. Untrained teachers without secondary education would virtually disappear in this period. Primary school attendance should become almost universal for children aged 6 or 7 through 13 or 14, with many unaided schools being absorbed into the public system and outlying rural communities receiving schooling for the first time. From 1980 fees would be removed. During this period a marked improvement in children's learning achievement should be becoming noticeable, paving the way for a reduction of the primary course to six years.

9.34 At secondary level a major challenge will be to maintain the chances for primary school leavers to find a place in secondary school, following the virtual doubling of primary school output. Even with the six new lower secondary schools being developed, there is no possibility of the Government and Aided schools satisfying the need for more places. Instead Government resources for the expansion of secondary education should be channelled in the form of partial assistance to selected unaided, community-based lower secondary schools. A target of 10 000 - 12 000 places at Form in 1985, with perhaps 3 000 in the 21 presently existing publicly supported secondary schools, and the remainder in partially assisted schools, is probably as much as could be achieved. This would represent about a 50 percent continuation rate from Standard 7. The main constraints to a faster rate of expansion would be shortage of teachers, and limits to the ability of local communities to pay their share of the capital and recurrent costs involved.

9.35 At senior secondary level expansion would take effect partly by a start with the conversion of the present five-year secondary schools (grades 8-12) into three-year senior secondaries (grades 10-12), and partly by the provision of part-time evening courses of study at senior secondary level in all major population centres. These courses would be both general academic courses and, in appropriate centres, vocational ones as well. Opportunities for full time and day release technical training through the brigades, National Centre for Vocational Training and Botswana Training Centre would also be more numerous than at present. And in parallel with these efforts, a major expansion of other opportunities for adults and youth to acquire skills and knowledge of all kinds out of school would take place with the co-operation of employers, community organisations, the extension services and so on.

9.36 In the teaching field, the quality of intake to the colleges should by this time be beginning to improve, but the schools will still be very dependent on national servicemen at the primary level and, despite a start with the two-year post-Form V course for lower secondary teachers, on expatriate help at secondary level. Many of the measures to provide teachers with better promotion prospects and an attractive career ladder would come into effect in this period.

9.37 Throughout this period the economy would still be heavily dependent on expatriate manpower, particularly in secondary and higher level teaching. It should be possible however to localise many senior and other administrative posts and the overall shortage should gradually ease for two reasons. First the overall growth of the secondary and higher system already under way in 1977, would result in bigger outputs of qualified manpower; and second a smaller proportion of the output at each level (above junior secondary) will study full time at the next level, because the possibility of combining part-time study with work will become more common.

3. The Long-Term (post-1985)

9.38 In this phase the Commission's recommended long-term structure would be fully implemented. Primary education would be universal, and by about 1990 most children would be able to continue to the end of the ninth grade, receiving at least three years junior secondary education. A fairly high proportion of children would then pass on to various kinds of courses at the senior stage, some in full time schools (including boarding provision where necessary) and many others through part-time courses of education and training of various kinds, both general and vocational in nature. For those reaching senior certificate standard, a multi-faceted university would offer a wide range of courses both full time and part-time. Complementing this formal education provision there would be a comprehensive network of out-of-school education opportunities for those who wanted to improve their knowledge and skills without pursuing formal full time courses.

9.39 A characteristic of the education system at all levels would be its linking with the life and work of the adult community. School education would be more practical in its orientation and students would participate in work projects on behalf of their schools and the community at large. Entering work, with possibilities of continuing study on a part-time basis, would become a respectable and attractive alternative to continuing full time study or training. Work experience would be a normal part of initial training for any occupation and those who attended senior secondary school on a full time basis would, on completion, undertake a period of community service before continuing their study or entering work. All career ladders would provide possibilities for employed adult workers to continue their studies, thus making themselves more eligible for advancement in their work. A network of learning opportunities would also be available for self-employed adults through the extension services, community organisations, the radio and libraries.

9.40 At last the need for expatriate manpower would significantly decline and Botswana would begin to produce sufficient managers, instructors and other specialists to meet her needs. Adequately qualified candidates would be available in the required numbers for entry to teacher training courses.

CONSTRAINTS

9.41 We have set out our recommendations at length, and it remains for us to discuss how far the programme we have proposed is realistic in terms of finance, of manpower, and of administrative capacity. Could Botswana in fact implement the kind of programme suggested here?

Financial Considerations

9.42 In the short term, up to the end of the present Plan period we do not believe our proposals will create financial difficulty for the Government. The Plan allows for a 65 percent growth in the Ministry of Education's recurrent budget, which accounts for over three quarters of Government expenditure on education and training, from P12.0 million in 1976/77 to P19.8 million in 1980/81 (in constant prices). Education's share of expenditure by Government departments is expected to rise from 19 percent to 23 percent.

9.43 The proposal in the current National Development Plan for increased enrolments in that part of the formal education system under the Ministry of Education are shown in the following table.

TABLE 9.1

Fourth Development Plan Projections of Enrolment by level, 1976-81

Level	1976	1981	Increase 1976-81
Primary	124 265	156 862	26.2%
Secondary	9 595	12 304	28.2%
Teacher training colleges	545	878	61.1%
NCVT	386	509 *	31.8%
Brigades	1 127	1 784 *	58.3%
University degree	494	685 *	38.7%

* figures for 1980/81

Source: Constructed from data in NDP IV, Chapter 6.

9.44 It will be observed from the above that in no case are enrolments projected to rise as fast as the overall level of education expenditure (65 percent). The difference is greatest in the case of primary and secondary schools which together accounted for over 70 percent of Ministry of Education and Councils' combined expenditure on education in 1975 (see Appendix A Table 21). Those areas and levels where the future enrolment increase under the Plan is expected to be largest in fact account for rather small proportions of the educational budget, even though (except for the brigades) they are the most expensive levels in cost per place. It is also worthy of note that during the last Development

Plan period the university and the brigades both 'undershot' their enrolment targets.

9.45 We would in fact expect primary and secondary education enrolment to be somewhat higher in 1981 than the Plan forecast, if our recommendations in chapters 4 and 5 are accepted. But even allowing for these higher primary and secondary numbers that the Commission envisages, there is room for expenditures to rise much faster than enrolments. In other words there is a considerable margin allowed in the Plan for increase in unit cost (cost per place), which ought to result in improvement in the quality of education offered. Unit cost rises should not however be planned for at all levels. For example the University Development Plan states that the cost per student at the University will fall -- a trend which the Commission welcomes, since it appears totally unjustifiable for Botswana to spend 90 times as much per student annually at the University as in primary school. Costs per student are also high at the training colleges and National Centre for Vocational Training and we would expect that qualitative improvements could be made within present unit cost figures at those institutions.

9.46 Rises in unit costs per student at primary and secondary level might take any of the following forms:

(a) Higher salary costs of teachers per student in the form of
  either (i) higher real salary scales for teachers,
  or (ii) teachers higher on their scales ('incremental creep'),
  or (iii) alteration in the teacher mix, with a higher proportion on the superior scales,
  or (iv) fewer pupils per teacher;

(b) More or better paid other staff in proportion to student numbers;

(c) More or improved material inputs to the schools.

9.47 Since salary costs accounted in 1975 for 86 percent of primary education costs and 61 percent of secondary education costs (Appendix Table A-21), it is clear that the trend in the salary bill, especially of teachers, is in fact the key issue. The Government has said in the Development Plan that salaries of Government employees will not rise faster than the cost of living, in accord with the Government's incomes policy. Since all the Plan figures are in constant prices (and so do not allow for any rise in the cost of living) we concluded that no rise in teacher salary scales need be taken into account within the 65 percent rise in the education budget. Any rise in teacher salary scales would only match the overall rise in prices and in Government revenues.

9.48 We doubt whether our second factor (a,ii) of 'incremental creep'-- the ageing of the teaching force so that the 'average teacher' appears higher up his existing scale -- will have much effect at primary level in the short and medium run because larger numbers of new entrants from the training colleges would tend to keep the average down, and our proposal for probationers and national service would not affect this. There might be some 'incremental creep' at secondary level if expatriate teachers could be persuaded to serve longer.

9.49 The third factor (a,iii), a changing composition of the teaching force, is more difficult to judge. The question is whether, even if scales themselves did not change, a higher proportion of the teaching force might in future be on higher scales because either unqualified teachers were being replaced or teachers might qualify for upgraded status and thus transfer to higher scales: or more promotion posts might be introduced. We would expect there to be some upward movement here, particularly in the longer term if our proposals for a better career structure with more promotion posts were introduced. On the other hand the Commission urges that the creation of more promotion opportunities be linked with the introduction of the principle that qualified teachers be paid mainly according to the responsibility of their post and not according to their certificate, and this would serve to stem the tide of pay-inflation through qualification-inflation, which is at present an extremely serious threat to the education budget. On balance we would expect some short-term shift in the compostion of the teaching force towards higher scales, but not a major one.

9.50 Finally there is a fourth possibility (a,iv) that salary costs per pupil might rise because class sizes might fall. Here in the short term neither the Plan nor the Commission foresees any marked change. We do expect some small drop in average class size as primary schools are taken to less densely populated areas, and we have indicated that extra teachers for remedial teaching should be a high priority when funds become available.

9.51 We have intentionally dealt at length with teachers' salaries because of their determining effect on the level of the education budget. We regard it as essential that Government first set up a mechanism through the Unified Teaching Service to record and regulate the number of teachers employed, particularly in primary schools; second, adhere to its declared policy of containing public sector salaries at their present 'real value' levels, in accord with the incomes policy; and third, move as soon as possible to a position where teachers' pay is geared to the job rather than to the background education or training of the individual teacher. *These three actions are indeed the key to the containing of educational inflation and to the financial possibility of implementing our Report.*

9.52 Our conculsion from the foregoing discussion is that, in the short-term, enrolment expansion and higher teacher salary costs (a, i - iv) will pre-empt only a part of the resources available, leaving quite a substantial margin for various kinds of professional support for the teacher (b) and for improvement of school materials and physical faculties (c). This suggests there is an ample margin for our short-term programme to be carried out within the 15 percent annual growth that Government has envisaged, allowing for a possible loss of revenue from 1980 onwards of P300 000 - P400 000 in respect of primary school fees. We would in fact foresee the possibility that there might be some surplus within the recurrent ceiling for carrying through, on the development side of the budget, two of our most important short-term recommendations for the primary school building programme to be accelerated and for proper equipment to be provided for every classroom.

9.53 Many of the Commission's recommendations should be seen as giving definition to broad intentions already announced by the Government, and thus not necessarily involving expenditures which are not already envisaged. For example, the Plan already speaks of implementing programmes to strengthen the secondary and primary inspectorates, curriculum reform, more resources for school broadcasting, in-service training and so forth. Undoubtedly our emphasis on rather large cadres of inspector/supervisers and teacher advisers for primary schools, on the introduction of more practical work into the schools, on school community links, and on regular assessment of pupils, may involve programmes of rather wider scope than those announced in the Development Plan. In other areas however we believe that our proposals would reduce proposed Government expenditure in the short term. We particularly have in mind our proposals for staffing primary schools through the national service scheme and the intoduction of probationary teachers. This will both obviate the need for expenditure on a big upgrading project for unqualified teachers, and will save the rather considerable rise in the salary bill which would follow the award of qualified status to 1 000 unqualified teachers,

9.54 We conclude then that in the current Development Plan period our proposals would be within the budget ceiling that Government has set. Beyond 1980/81 however it is more difficult for us to state precisely whether the Commission's recommendations would fall within budget limits that Government would at that time be contemplating. Between 1980 and 1985 we would expect primary education enrolment to continue to grow, at approximately 6 percent per annum, reflecting population growth, the effect of abolishing fees, increased repetition at Standard 4, and the extension of public primary schooling to areas now having unaided or no schools at all. It would also be expected that an increased flow of trained teachers from the colleges would gradually replace (and be on higher salaries than) the national servicemen.

9.55 More significant however would be the nature of developments at secondary level. It will be recalled that the Commission's aim is to find a way of facilitating expansion of second level opportunities at a very much lower cost, both capital and recurrent, than the present secondary schools. Our approach to this is twofold. First for the long run we propose the creation of a lower secondary school of three grades, which we expect to be considerably cheaper than the present secondary schools in terms of recurrent cost. At the secondary level our strategy provides for much of the long term expansion to be of part-time education opportunities. Second, we are proposing for the medium term (from about 1980 onwards) that the means of expansion should be through a programme of selective subsidisation to unaided schools.

9.56 We believe that at present cost levels it should be possible to offer the three year junior stage of education at an annual cost per place of about P180, compared with estimated current costs of P430 in existing secondary schools. We arrive at this figure as follows:

Average salary allowing for responsibility posts, of a secondary teacher (Senior secondary education + 2 years training)	P2 500
Add housing and other allowances	500
Total salary cost per teacher	P3 000
Teacher cost per class at say 1.4 teachers per class	4 200
Add 50 percent to allow for non-salary element	2 100
Total cost per class per year	6 300
Divide cost per class by 35 pupils: P6 300 ÷ 35 =	P 180

Note: The Commission stresses that these figures and those below in paragraphs 9.58 and 9.59 cannot be precise estimates: they are illustrative figures to indicate orders orders of magnitude.

9.57 The saving, compared with current costs of secondary school would mainly derive from three sources:

(a) it is assumed that the schools would all be day schools;

(b) teachers would be used more economically (1.4 per class instead of 1.67);

(c) the average teacher would be on a lower level of emoluments than current teachers, being slightly less highly qualified.

9.58 If one assumes a participation rate of 80 percent of 76 000 children born between 1974 and 1976, this would give a total annual cost of P10.9m (60 800 x P180). From this should be deducted about P1.8m representing the saving if primary schools were reduced from seven years to six and Standard 7 were eliminated: and a further P4.5m would be saved at junior secondary level by replacing over 10 000 Form I-III places in the present high cost system, though these places would be used at senior secondary level. The net cost of P4.6m is large, but not impossible to contemplate . If the Ministry of Education budget were to grow at 10 percent during the 1980s from a 1980/81 level of P19.8m. then the total cost of near-universal junior secondary education would account for about a quarter of the recurrent education budget at the end of the decade, About half the increase would be the net additional cost of introducing universal junior secondary education.

9.59 The Commission does not of course propose that Botswana should move quickly to near-universal junior secondary education and in the medium term the burden on the recurrent Government budget would be far less. The build up from the current situation where about 25 percent of the 15 year-olds enter secondary school in the Government aided or unaided sectors to one where 80 percent of a larger group was enrolled could only take place very gradually as financial resources, teachers, buildings and organisational capacity became available. Our proposal is that most of this expansion should initially take place through a system of partial subsidies to unaided schools, with Government gradually increasing the level of subsidy and also financing a generous bursary scheme to help poorer families meet the costs. Once again, to take illustrative figures rather than concrete proposals:

	1980	Annual increase 1980-85	1985
Enrolment in unaided schools, say	10 000	20% p.a.	25 000
Cost per place (recurrent), say	P100	P10 p.a.	P150
Government subsidy per place of say	50% = P50	5% total cost	75% = P112.50
Net charge to student p.a.	P50		P37.50
Total cost to Government of subsidy	P500 000		P2.8m

9.60 The Commission thus clearly envisages higher total expenditure on both primary and secondary education in the 1980s. However the probable alternative of continuing expansion of the education system on the present lines would almost certainly achieve much lower levels of enrolment for similar magnitudes of expenditure. Our main concern has been to find ways of extending educational opportunity to many more people, but within the budgetary resources likely to be available. We believe our proposals would achieve this.

9.61 At the same time we stress continual vigilance over educational expenditure and a strategy of financing education which pays particular concern to the following:

1. Teachers' salary scales, along with all modern sector salaries, not to increase faster than prices: but more opportunities for the individual teacher to obtain higher pay through promotion.

2. Salary scales to attach to posts, on the basis of graded responsibility; education and professional qualifications not to determine salaries directly (but to be taken into account, along with job performance and other factors, in promotion).

3. Due economy in staffing ratios.

4. Increased participation by the community, parents and employers in development of and support for educational institutions.

5. Universal stages of education to be fee-free; but at levels where education is rationed, some contribution to be exacted in the form of financial charges or service obligations.

6. Attractive facilities for part-time study and incentives to use them as an alternative to full time enrolment.

7. Radical and drastic measures to bring the unit costs of higher education and vocational training more within Botswana's financial capabilities.

Manpower Considerations

9.62 There is no easy way out of a manpower shortage for a country with a low initial level of education in its population and attempting to develop rapidly. One solution is to mount 'crash' programmes of training and of upgrading skills. This may well be necessary sometimes but, as we have tried to indicate in respect of teachers, experience among Botswana's sister African countries suggests that it can create longer-term problems. One may find that in the short term one can only recruit people who lack the essential abilities and qualities required; in the longer term, when the supply of good recruits improves quite rapidly, these earlier recruits may block the recruitment and promotion of their much abler juniors.

9.63 To some extent one can 'buy time' by employing expatriates until local power resouces are sufficient. Botswana is doing this on a massive scale and one cannot feel comfortable about suggesting large increases. But as we indicate below (paragraphs 9.70-9.76), there may be some selected areas where more foreign assistance would be useful in tiding Botswana over her temporary shortages of personnel.

9.64 A third approach which we have recommended as appropriate to a country in Botswana's situation is to limit, as far as possible, withholding or withdrawing manpower from the economy for periods of full time study. As far as possible in this phase of Botswana's development, men and women should be encouraged to learn on a part-time basis while making a productive contribution to the economy. In this connection the many in-service training courses we propose for administrators and teachers, library staff and careers advisers etc. must as far as possible take place in vacations. Resort to full time courses, either in Botswana or overseas, must be extremely sparing at present.

9.65 Fourthly, one can economise on high level manpower by inducing as many qualified persons as possible to contribute their spare time in the evenings or at week-ends to part-time teaching. Where necessary they should of course be paid for their services. We believe that our proposed programmes of part-time education will have to be staffed largely on this basis.

9.66 Outside of classroom teachers, in respect of whom supply and demand has been discussed in chapter 6, our main proposals in the recommendations for extra staff posts are the following. We list them in what we regard as order of priority, whilst recognising that these are not interchangeable categories so that the possibilities of actual recruitment may not accord with our listing:

First Priority

- District Education Officers/Supervisors. We have indicated that about 25 personnel are required in this category to act as inspectors of primary schools and coordinators of professional support services. Some of the existing cadre are of the quality required but there is a serious deficit. A few of the better primary school teachers would be suitable as supervisers but this will not normally be sufficient background for the District Education Officer post (see paragraph 8.55).

- Teacher advisers. About 25 to 30 staff will be required to advise probationers and national service teachers on the job in the schools. Existing college and in-service team members might together provide about half the necessary numbers, but there will be a shortfall remaining (paragraphs 6.40-6.47).

- Establishing the Curriculum Development and Testing Unit. Many existing staff particularly from the Regional Testing Centre could be incorporated in the nucleus of this (paragraph 5.87).

- Development project on assessment of pupil performance. A team of up to 10 persons may be required, which will work closely with the curriculum and testing unit and with those responsible for In-Service Training (paragraph 4.64).

- Staff to train secondary school teachers of practical subjects and instructors for vocational courses (paragraph 6.93).

- Strengthening of capacity of Botswana Extension College for servicing all kinds of out-of-school education (pargraph 7.22).

Second Priority

- Officers in the Ministry of Education to handle out-of-school education (particularly continuing part-time studies), and links with unaided schools. (paragraph 8.46).

- Inspectors to develop the teaching of practical subjects in schools (paragraph 8.46).

- Staff for the proposed Centre for Setswana Studies (paragraph 7.51).

Third Priority

- Staff for the Schools Broadcasting Unit (paragraph 8.46).

- Library Adviser (paragraph 5.61).

- Social Studies Inspector (paragraph 8.46).

- Liaison Officers in Unified Teaching Service to deal with expatriate teachers (paragraph 6.66).
- Staff for overseas missions, to undertake recruitment (para. 6.65).

- Additional staff for Radio Botswana, National Library Service, Information Services and National Museum (paragraph 7.51).

9.67 It will be clear that experienced professionals will be required for almost all of these posts. There will be a handful of Batswana returning from studies abroad who may man one or two positions, but generally speaking they will have to be filled from within the present education system or by hiring expatriates. In many cases expatriates with expertise will be needed to help establish these units. Where this can be avoided however and Batswana with the necessary background are available, we believe it would be better to release them from the schools and to replace them in teaching positions with less qualified Batswana or expatriates. This is a most painful choice, but cannot be avoided.

Administrative Considerations

9.68 We have discussed in the previous section the need for additional posts to be created, but it must be borne in mind that an increased administrative load will be felt at all levels -- central, local and institutional. We have tried to be sparing in our recommendations for new posts and units with an eye to the need to conserve funds. There will be many requests from existing sections and units for additional staff to cope with the burden that more substantial professional support to schools and teachers will inevitably entail. Each will have to be considered on its merits and some will prove justified.

9.69 Our suggestions for strengthening the administration have been set out in chapter 8 and in the earlier section of this chapter on implementation. We would particularly draw attention to our suggestions (paragraph 8.46) for streamlining the administrative 'infrastructure', ensuring that regulations and procedures are updated and responsibilities clearly delineated. In this way we are hopeful that a great deal of the existing administrative work concerned with giving approval or interpretation of regulations could be devolved onto those nearer the decision making point, leaving the more senior officials freer to concentrate on policy and the development of services.

ASSISTANCE FROM ABROAD

9.70 One of Botswana's key principles is self-reliance, and it applies at the national as much as at the individual level. Botswana has already taken enormous strides in freeing herself from complete dependence on outside assistance and this has left her freer to choose the degree of interdependence with the outside world that she wishes to have. As a small country in terms of population and with a limited range of natural resources she must of course maintain quite extensive trading links with the rest of the world.

9.71 The Commission notes that the policy of the Government has been to draw on external assistance as a means to make the country ultimately self-sufficient economically and in terms of skills. The philosophy underlying this approach is that through co-operation with others, self-reliance can be achieved sooner than if Botswana were to rely solely on her own resources. So long as it is used selectively, and each offer of assistance is closely scrutinised as to its terms and the long-run benefit it will bring to Batswana, this approach can speed up development in the educational, as in other sectors. The possible danger that large numbers of expatriates with their conspicuous consumption patterns may distort priorities and values amongst Batswana has however to be borne in mind.

9.72 We hope that any requests by the Botswana Government for assistance in implementing a reform programme for education will encounter a sympathetic response amongst external assistance agencies. Botswana is faced with a number of critical problems and uncertainties as a result of her geo-political position and needs the support of all countries concerned with the fight against racism in Southern Africa. Beyond that, she has shown a capacity to plan and execute development projects which compares favourably, bearing in mind her critical shortage of skills, with that of many other countries. Although her growth rate now appears quite high, the economy is very vulnerable to external factors -- political, economic, climatic. Her outside friends should not be mislead by the official figures for per capita income. As the National Development Plan points out, a very high share of the national product in fact accrues to foreigners and foreign-owned companies. The recently completed Rural Incomes Survey has demonstrated that there are large numbers of extremely poor Batswana.

9.73 The Commission is particularly concerned lest external aid donors should take the view that Botswana's reliance on overseas teachers is a sign that she does not take the production of local teachers seriously. A country with a manpower shortage as acute as the one confronting Botswana must make decisions about which sectors can be localised first. This depends on the strategic nature of the jobs and on the ease of filling posts in Government, while turning to overseas countries for teachers, particularly at secondary level. Any country wanting to keep key decisions in the hands of its nationals would be bound to follow the same policy. It is our considered opinion that Botswana has now gone as far as it is reasonable to go in improving the incomes of local teachers to be competitive with other professions (though, as we have indicated, the promotion prospects should be made more attractive). We feel sure that it is only a matter of time before adequate number of Batswana become available for secondary teaching. Attempts to accelerate the rate of production of local teachers too rapidly would be counter-productive, for it could result in low quality entrahts obtaining permanent posts in secondary teaching under emergency training programmes, with harmful long-term effects on the structure and quality of the teaching force.

9.74 The Commision therefore urges external donors to continue their valuable assistance to Botswana through teachers at the secondary and other levels -- whether for schools or training institutions. This is helping Botswana to 'buy time' until her education system can be staffed, as it surely will be (as the experience of other countries shows), with locals. It is also a safeguard against the day that will come soon when teachers from Zimbabwe will want to return home after majority rule is established. We have made a number of suggestions in chapter 6 about ways in which the supply of teachers might be improved and contracts extended. Although we would see a declining demand for less experienced volunteer teachers in the established Government schools, many might still be welcomed in the unaided institutions if such service can be arranged.

9.75 Teacher supply is an example of the type of aid which is best suited to Botswana's needs, for it comes without too many conditions and it supports ongoing services which are part of the Botswana Government's own programme. The assistance for primary school buildings and school meals are other examples of this kind of aid, where resources are provided and can be readily used by Botswana's education system. These types of assistance also happen to be ones where assistance most easily flows to rural areas and to all sections of the community, a point which is currently of great concern to aid donors. There will be many requirements of such kind in future, especially in connection with the need to construct junior secondary schools.

9.76 The Commission wishes to stress the point that whilst external aid agencies naturally wish to ensure that their aid is productive, any tendency to seek only 'strategic' projects with 'multiplier effect' would not necessarily be the most beneficial from Botswana's point of view. Broad sector support is often quite as valuable as the specific project or the specialist team.

9.77 Nevertheless the Commission has identified a number of new projects which may need to be established with external help, including most obviously the primary school project to develop monitoring of pupil performance, and the establishment of the curriculum development and testing unit. In these areas the expertise required is not yet wholly available in Botswana.

9.78 The Commission considers that the Botswana Government itself is the proper body to indicate which of the needs identified in this Report are in fact appropriate for external assistance and the Commission therefore recommends that Government construct a list of needs for external assistance when it has thoroughly persued this Report.

9.79 *The Commission recommends that the Government should draw up a list of needs for external assistance in the light of this Report. (R-156).*

SUMMARY OF RECOMMENDATIONS

A list of all the Commission's recommendations is provided here for the convenience of readers. This is a summarised version only of each recommendation: the full text of each recommendation is to be found at the place indicated. Should any ambiguities be found, it is the full text of each recommendation that should be taken to express the Commission's stand-point.

KEY

'Preparation (months)' (see paragraph 9.28)

This refers to the period in months which the Commission anticipates as being required for translating broad policy decisions, once made, on each recommendation into operational terms. The categorisation used is as follows:

0-12	preparation period of up to twelve months (hopefully in many cases in time for start of 1978/79 financial year)
12-36	preparation period of up to three years, in many cases by 1980
36 +	long-term preparation period lasting beyond three years (beyond 1980)
--	no preparation required. In some controversial areas the Commission recommends 'no change'.

'Implementation' (see paragraph 9.28)

This column indicates the Commission's estimate of the time period required to implement programmes once the preparation period is complete. The meaning of the letter symbols used is as follows:

I	immediate
S	short-term implementation of up to two or three years
ML	medium to long-term implementation period of over three years
C	continuing implementation

No.	Paragraph	Recommendation	Preparation (months)	Implementation
		CHAPTER 4: PRIMARY EDUCATION		
		Distribution of Resources		
1	4.08	Future newly qualified teachers to spend at least three years of five-year bonded period in remote schools	0-12	I
2	4.08	Existing qualified teachers, if under age 35, to have spent at least two years in remote schools as condition for eligibility for promotion	0-12	I
3	4.08	Special admission quotas to be introduced at training colleges for candidates from remote rural areas. Any such candidates admitted on concessionary terms to spend five-year bonded period in home area	0-12	I
		Access to Education		
4	4.11	A list of unaided schools should be compiled	0-12	I
5	4.18	In outlying areas one- and two-teacher schools to be established where at least 20 children require schooling	0-12	C
6	4.23	The minimum age of entry to be the age of six, and the maximum age of entry should be raised to nine, on January 1 of year of entry	0-12	S
7	4.24	When a new public school system is established for the first time in any area, children up to age 12 to be admitted for first two years after opening	0-12	C

No.	Paragraph	Recommendation	Preparation (months)	Implementation
8	4.25	No compulsory attendance on national basis: local councils to be free to introduce it when found appropriate	36+	ML
9	4.27	*Primary school fees to be abolished from 1980	12-36	I
10	4.29	*Primary school to be made accessible to all under a phased programme providing 1977-79 expansion of Standards 5, 6 and 7 to cater for large numbers seeking promotion from lower standards, 1980 abolition of primary school fees, 1980-82 phased takeover of unaided schools 1983-85 provision of schools for smaller communities who lack them	12-36	ML
		Buildings and Furniture		
11	4.31	*Classroom space to be provided for every child within five years	0-12	ML
12	4.32	Priority in constructing buildings for communities making self-help efforts	0-12	C
13	4.34	*All permanent classrooms to be furnished by 1979	0-12	S
		Teachers		
		(see recommendations 73 - 110)		
		Curriculum		
14	4.46	The primary curriculum to be made more practical for all children; but vocational training not appropriate in primary school	12-36	C

No.	Paragraph	Recommendation	Preparation (months)	Implementation
15	4.51	Syllabus revision to include establishment of a basic core; concentration on Setswana, English and mathematics; learning sequences from known to unknown; more simple language in readers and textbooks; more concentration on Botswana and Africa; the syllabus and teacher's guides to be provided to every teacher	12-36	S
		Books and Materials		
16	4.52	Survey to be conducted of books and reading materials currently in schools. Deficiencies to be made good by 1979 school year	0-12	S
17	4.52	Arrangements for distribution and storage to be reviewed	12-36	ML
18	4.52	Content of items currently in use in different subject areas to be reviewed	12-36	S
19	4.52	Preparation and publication of more suitable books and materials for primary level to be arranged	12-36, 36+	ML
20	4.53	Basic needs for supplementary materials and teaching/learning aids to be reviewed and new lists to be prepared and issued	12-36	I
21	4.53	Support for training college programmes to train teachers to make own teaching aids	12-36	C
		*Medium of Instruction		
22	4.59	Setswana as medium in Standards 1 - 4, transition to English in Standard 5	0-12	S

No.	Paragraph	Recommendation	(months)	Implementation
23	4.59	Setswana to have more time, equal status with English on Primary School Leaving Examination and secondary school selection	0-12	I
24	4.59	Non-Setswana speaking schools to have compensation on Primary School Leaving Examination through adjustment of scores	0-12	I
25	4.59	English to continue as subject from Standard 1	--	C
26	4.59	Development of better materials for Setswana	0-12	ML
		Automatic Promotion		
27	4.64	*Automatic promotion to be retained, in modified form, with: standardised tests for use by teachers, curricular materials to be graded by difficulty, development of remedial teaching, a major test of competence in Setswana in Standard 4; unsatisfactory performers to repeat Standard 4, repeating other grades only in exceptional cases, standardised records of progress of each child to be kept, written report to parents on child's progress yearly, courses for teachers on checking on children's progress, major development project, with donor assistance	0-12	S
		Examinations		
28	4.74	Examinations to be used as aid to curriculum development through item analysis of answers	0-12	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
29	4.74	Letter-grades to signify constant standard of performance between years and to represent properly graduated differences in achievement	0-12	C
30	4.74	Social studies and science to be included in Primary School Leaving Examination, replacing General Knowledge	0-12	I
31	4.74	Pupils to be given more information on their examination performance and previous years' question papers to be released	0-12	I
32	4.74	All Primary School Leaving Examination papers to be taken into account in secondary selection	0-12	I
		School Calendar		
33	4.77	Primary course to be shortened to six years eventually	36+	ML
34	4.77	Timing of school year to remain as at present	--	C
		CHAPTER 5: SECONDARY LEVEL EDUCATION		
		Structure		
35	5.13	*Structure of education to be changed by 1990 from present 7-3-2 structure to 6-3-3; first nine years including six year primary and three year junior secondary to be open to all, followed by selective three year senior secondary	36+	ML
36	5.28	*No new bursaries for the sixth form course at Maru-a-Pula	0-12	I
37	5.35	*An immediate programme of support for unaided schools to be launched, initially of a professional nature but later in the form of financial subsidy and teachers	12-36	I

No.	Paragraph	Recommendation	Preparation (months)	Implementation
38	5.35	*Unaided schools to be progressively absorbed into the public system	36+	ML
(142)		Officer with responsibility for policy towards unaided secondary schools to be appointed in the Ministry of Education	0-12	I
		Access to Secondary School		
39	5.50	A quota system to be introduced providing secondary place(s) for each primary school	0-12	I
40	5.50	Revision of selection system to ensure that all well-qualified candidates receive and can accept offers. No exclusion from Form I on grounds of age	0-12	I
41	5.50	*Tuition fees to be restored to 1966 value in terms of purchasing power, extra revenue being used for bursaries at unaided and Aided schools. Fees to be raised higher at secondary level, or national service introduced	0-12	I
42	5.50	Charges to be uniform at all Government and Aided schools	0-12	I
43	5.50	Bursary system should be revised to make it more fair and efficient, with more assistance for those in need	12-36	I
44	5.53	Heads to be given power to remove pupils for exceptionally poor academic performance	0-12	I
45	5.53	Steps be taken to reduce drop out of girl pupils through pregnancy	12-36	C
		School Organisation and Size		
46	5.57	Class size in secondary schools to remain as at present. Work in smaller groups to be encouraged and teaching of practical subjects and laboratory work in science to be in half classes	12-36	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
		Curriculum		
47	5.61	(a) School libraries to be developed and (b) staff specially designated as library assistants (c) library adviser to be appointed in Inspectorate	0-12 0-12 0-12	C I I
48	5.78	*Junior secondary curriculum to consist of common six subjects: Tswana culture, English, mathematics, practical subjects, science, social studies. All student take and examined in these six	12-36	S
49	5.78	* Senior secondary to have same six subjects as core, plus two optional units allowing specialisation	12-36	S
50	5.78	Strengthening curricular continuity between junior and senior levels	12-36	S
51	5.78	New emphasis in secondary curriculum development to include Tswana culture: emphasis on Setswana as medium of communication in modern world, Other languages: high priority for English; French not to be normal school subject, Mathematics: reconsideration to be given to possibility of syllabi combining traditional and modern maths and to possibility of alternative more-applied syllabus at senior level, Science: integrated science at junior level; flexibility and choice at senior level, Social science: emphasis on Botswana, her relationship to outside world; a development studies orientation,	12-36	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
51 (cont.)		Practical studies: at least one practical subject to be taken by every student, practical orientation to teaching of the subjects and practical work for two or three hours per week included in curriculum		
52	5.78	Ministry should provide guidance on time allocations for each subject, but final decisions with Heads	0-12	I
		Examinations		
53	5.87	Ministry of Education to establish a national testing centre to develop and organise examinations	0-12	S
54	5.87	A Botswana National Examinations Council, to be established	0-12	I
55	5.87	At senior secondary level a Botswana Certificate of Education be established in conjunction with the Cambridge Board	12-36	S
56	5.87	Junior Certificate (a) to contain more items testing explanatory and reasoning powers of pupils, (b) possible to have separate standardisation of marks for unaided schools, (c) to have raw scores as well as standard scores issued	12-36	S
57	5.87	Senior Certificate (a) to consist of both international papers and locally-oriented papers, (b) papers to be graded in accordance with international standards, but performance requirements for award of Certificate to be decided according to Botswana's needs	12-36	S
58	5.87	Sharing of experience on regional (Southern African) basis to continue	--	C

No.	Paragraph	Recommendation	Preparation (months)	Implementation
		Careers Advice		
59	5.90	Employing agencies to be encouraged to visit schools with careers information	12-36	C
60	5.90	Careers guides to be provided for schools	12-36	I
61	5.90	A male and female member of staff to be designated at each school as careers staff	0-12	I
62	5.90	Annual courses and conferences to be arranged for such careers staff	12-36	C
		School and Community		
63	5.95	*Schools should be invited to make proposals for cooperation with local community	0-12	C
		Boards of Governors		
64	5.98	Boards to be established at all senior secondary schools	0-12	S
		Vocational Education		
65	5.102	Technical orientation for high school at Selebi Pikwe	0-12	S
66	5.104	National Centre for Vocational Training to continue its new course structure taking steps to ensure employers needs being met	0-12	C
67	5.104	NCVT should offer wider range of courses, including part-time courses, and be utilised by other agencies providing training when this improves efficiency	0-12	C
68	5.104	NCVT should continue present technician training programme, if demand justifies it, but not expand unless more technicians needed	12-36	ML

No.	Paragraph	Recommendation	Preparation (months)	Implementation
69	5.105	Trade test system should be reviewed; standard of Test C should be raised; B Certificates should be given for specialised modules of training, and A Certificates granted when a sufficient range and number of B Certificates have been accumulated	12-36	S
70	5.105	Tests should be based upon clear job specifications, which should be compiled immediately	0-12	S
71	5.105	Trade testing should remain the responsibility of the Ministry of Home Affairs/Labour, but the National Centre for Vocational Training should be more closely involved	0-12	S
72	5.106	Botswana Training Centre should become a national college of commerce and administration, serving both public and private sectors, and offering part-time learning opportunities	12-36	ML
		CHAPTER 6: TEACHERS AND TEACHER TRAINING		
73	6.09	Expressed preferences of candidates opting for teacher training at Junior Certificate or Senior Certificate levels to be respected	0-12	I
		*A Career Structure for Teachers		
74	6.17	Creation of more responsibility posts in schools	12-36	S
75	6.17	Attachment of salary scales rather than allowances to these posts	12-36	S
76	6.17	Schools to be graded by size, with different scales for heads, deputy heads, according to school size	12-36	S
77	6.17	Long-term restructuring of teachers pay, basing differentials more on responsibility and less on qualification	12-36	ML
78	6.17	Construction of career ladders in teaching enabling any teacher to progress to pinnacle of profession	12-36	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
		*Service in Rural Areas		
79	6.19	Service in remote areas to be an obligation for all teachers, but equitably shared	12-36	C
80	6.19	Review criteria for designating posts for payment of allowances	0-12	I
81	6.19	Closer professional support forteachers in rural schools	0-12	I
82	6.19	Home leave travel payments scheme to be instituted	0-12	I
		Improved Professional Support for Teachers		
83	6.24	More regular use of consultative machinery	0-12	C
84	6.24	Financial support for professional activities of Botswana Teachers' Union	0-12	I
85	6.24	Establishment of a Botswana Teachers' Journal	12-36	S
86	6.24	Development of teachers' centres with permanent displays of materials.	12-36	S
87	6.24	More regular inspection and advisory visits (see para.8.46)	0-12	S
88	6.24	More regular conferences and courses	0-12	I
89	6.24	Involvement of teachers in curriculum development	0-12	C
		Future Supply of Teachers		
90	6.47	Build up capacity of existing primary colleges: no new college to be built	0-12	S
91	6.47	*National service to be introduced for Form V leavers, mainly in primary teaching at first	0-12	I

No.	Paragraph	Recommendation	Preparation (months)	Implementation
92	6.47	*Probationary year teaching in primary schools for teacher trainees prior to college entry. In year of introduction best among untrained teacers to fill training college places	0-12	I
93	6.56	Overall secondary staffing ratios to be held for time being at present levels, rising later to 1:28 at junior secondary and 1:23 at senior secondary	--	C
94	6.61	Relationship between pay scales of qualified graduate and teachers' certificate holders to be reviewed	12-36	I
95	6.65	Measures to improve supply of expatriate teachers: wider range of sources, recruitment officers in major overseas posts, abolition of regulation limiting teachers new to Botswana to eighth scale point at entry, expatriate teacher contracts to start January if possible and always to run to end of Botswana's school year, streamlining of teacher recruitment machinery and procedures.	0-12	I
96	6.66	Measures to reduce expatraite turnover longer contracts, review and possible renewal of contract earlier in contract period: more definite information for overseas recruit on whether extension desired by Botswana Specially designated personnel officers in Unified Teaching Service to handle liaison with expatriate teachers terminal gratuities to be more sharply graduated as incentive to renewal shift of emphasis away from volunteers in favour of experienced teachers	0-12	I

No.	Paragraph	Recommendation	Preparation (months)	Implementation
97	6.67	Newly recruited training college tutors from abroad to have period of observation of Botswana's primary school system	12-36	I
		Teacher Training		
98	6.84	Primary teacher training courses to be two years as at present	--	C
(3)	6.84	Entrants to teacher training colleges to be drawn from all geographical areas of country with special arrangements for areas of special need	12-36	I
99	6.84	Curricular emphasis in Teacher Training Colleges on professional classroom skills and sound foundation in Setswana, English and mathematics	0-12	S
100	6.84	Primary teachers must be capable of teaching any primary class. Subject to this proviso, some specialisation permissible	--	C
101	6.93	Education degree should replace degree with concurrent certificate	12-36	I
102	6.93	University courses for secondary teachers to have structure agreed at university level rather than by inter-Faculty bargaining	0-12	I
103	6.93	Basic non-degree course for secondary teachers to be two years post Senior School Certificate and moved to training colleges	36+	S
104	6.93	One year specialist Diploma course for trained teachers continue at University	12-36	ML
105	6.93	*Courses for practical teachers to be established using resources of University Faculty of Education and relevent technical training institutions with either a concurrent or an end-on structure	0-12	S
106	6.93	*Training of vocational training instructors and devising of an attractive scheme of service	12-36	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
107	6.105	A comprehensive scheme for in-service training and courses to be drawn up covering up-grading needs, specialist courses and refresher courses	12-36	ML
108	6.105	Up-grading courses to have professionally relevent content and to be externally assessed	12-36	ML
109	6.109	Options in teacher education to be available in the education degree at the University for aspiring tutors, who should normally have had primary teaching experience	12-36	I
110	6.109	Closer cooperation in teacher training between University Faculty of Education and training colleges	0-12	C
		CHAPTER 7: OUT-OF-SCHOOL EDUCATION		
		Extension Services		
111	7.22	*Botswana Extension College to receive higher priority in assignment of new staff positions for the education sector	0-12	I
112	7.22	Continued support for the Rural Extension Coordinating Committee as vehicle for coordinating extension programmes	--	C
113	7.22	Institutions training extension staff to cooperate and offer common elements in their courses	12-36	S
114	7.22	Evaluation of effectiveness to be an integral part of all programmes and criteria for evaluation to be developed	12-36	C
		Continuing Education and Vocational Studies		
115	7.29	*Government to develop a programme of part-time education using the facilities of secondary schools and other institutions in the evenings and at weekends	0-12	S
116	7.29	Part-time classes at schools and colleges to be under control of those institutions and linked with correspondence programmes	0-12	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
117	7.29	Employees of firms with ten or more workers to have the right to release from work for one half day per week to attend approved classes	0-12	S
		Work- and Production-based Training		
118	7.44	Continued Government support for the Brigades, but accounting procedures and safety practices to be tightened up	0-12	I
119	7.44	The off-the-job element in Brigades training to be increased with closer specification of learning objectives and fuller records of student progress	0-12	S
120	7.44	Training of brigades instructors and managers to be developed as quickly as possible (see also Recommendation 105)	0-12	S
121	7.44	A system of incentives, including apprenticeship and tax or levy to be explored as a means of encouraging training in the private sector	0-12	S
		Cultural and Recreational Programmes		
(134)		A coordinating body for cultural and recreational activities to be established	12-36	S
122	7.51	*An institution for the development of and research into Setswana to be established, possibly at the University	12-36	S
123	7.51	A programme for encouraging the writing and production of materials in Setswana to be developed	0-12	S
124	7.51	More adequate staffing and other support to be provided to the National Library Service, Information Services, and National Museum	0-12	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
		Common Resources		
125	7.58	Basic facilities such as buildings, communications networks and staff to be regarded as common resource for all types of out-of-school education	--	C
126	7.58	courses for school teachers in approaches to adult education be developed	12-36	S
127	7.58	A systematic scheme of service be developed for staff in out-of-school education; this should cover recruitment, training and terms of service	12-36	S
		CHAPTER 8: ORGANISATION, ADMINISTRATION AND PLANNING		
		Consultation		
128	8.10	Participation in institutional management by laymen, teachers, etc. to be encouraged	--	C
129	8.10	Government to support and encourage professional bodies and consult with them on issues affecting them	0-12	C
		Coordination within Government		
130	8.24	The National Committee on Educational Policy to be the main coordinating body and should regularly review progress toward plan and policy implementation	0-12	C
131	8.24	The Rural Extension Coordinating Committee to coordinate activities in the area of extension	--	C
132	8.24	An officer in the Ministry of Education should oversee continuing educational and vocation studies (see also Recommendation 143)	0-12	I

No.	Paragraph	Recommendation	Preparation (months)	Implementation
133	8.24	The National Technical and Vocational Training Board, working through a series of committees, to coordinate development of technical education and vocational training. NTVTB to meet more regularly and have permanent secretariat	0-12	I
134	8.24	A national cultural council to be established	12-36	I
135	8.24	*Cooperation between Ministry of Education and Ministry of Local Government and Lands is needed on expansion of primary education, location of schools, and requirements in schools of buildings, furniture, equipment, materials, etc. Consultation, joint planning and budget sesssions necessary.	0-12	C
		Ministry of Education		
136	8.46	Professional wing of Ministry to be headed by professional at Deputy Permanent Secretary level. This wing to incorporate officers for various levels and types of education, curriculum and professional support services, inspectorate	0-12	I
137	8.46	Administrative wing to cover resource provision to schools and Ministry organisation/staffing. To be headed by Undersecretary, possibly second Deputy Permanent Secretary	0-12	I
138	8.46	Policy Advisory Committee, composed of senior officers and serviced by Planning Unit staff, to meet regularly	0-12	I
139	8.46	All senior officers of Ministry of Education to engage in planning, with specialised Planning Unit, freed from executive tasks, giving support	--	C
140	8.46	*A new curriculum development, research and testing unit to be formed	0-12	S

No.	Paragraph	Recommendation	Preparation (months)	Implementation
141	8.46	The secondary inspectorate to be strengthened by advisers in social studies, pre-vocational areas, library development and careers advice. The inspectors, and the primary in-service team, to work closely with the Curriculum Unit	0-12	I
142	8.46	Schools broadcasting to operate in close conjunction with other professional services in the Ministry, and more attention to be paid to evaluation of results	0-12	S
143	8.46	Officers to be appointed with responsibility for out-of-school education and for links with unaided (secondary) schools	0-12	I
144	8.46	*Administrative procedures and responsibilities require codification to assist delegation of authority	0-12	I
145	8.46	Greater use to be made of educational statistics	0-12	I
146	8.46	*Improved financial planning to be developed	0-12	S
		Local Administration of Education		
147	8.55	*Management of primary schools should remain with local councils, with Ministry of Education being responsible for educational policy and professional matters	--	C
148	8.55	*District Education Officers to be appointed, at least of education officer rank	0-12	S
149	8.55	A statement setting out respective roles of Education Officer and local councils/education committees and procedures for cooperation to be issued	0-12	I
150	8.55	Present cooperative arrangements between Unified Teaching Service and local councils whereby council secretaries act as local agent for UTS to be formalised and respective roles set out	0-12	I

No.	Paragraph	Recommendation	Preparation (months)	Implementation
151	8.55	District education officers to be coordinators of professional support services to schools and teachers in their areas and to be assisted by a cadre of supervisors such that ratio of District Education Officers/supervisors to primary schools is at least 1:15	0-12	S
		Careers in Educational Administration		
152	8.60	A career structure in educational administration to be developed	12-36	ML
153	8.60	Flexibility and recognition of equivalences needed in entry qualifications to any particular grade. Part-time professional studies to be available to enable officers to obtain qualifications specified for promotion	12-36	ML
154	8.60	Entry to educational administration to be normally via teaching but possibilities also to be available for non-teachers	12-36	C
155	8.60	Short training courses to be mounted in Botswana in educational administration and supervision, with more extended courses in other countries for selected persons	0-12	S
		CHAPTER 9: IMPLEMENTATION		
156	9.79	List of needs for external assistance in light of this Report be drawn up	0-12	I

ERRATA

Page	Paragraph	line	
51	3.46	7	"1900" should read "1990"
82	4.75	4	insert "secondary" after "junior"
86	5.06	5	insert "in public or private schools" after "Form I"
88	5.10	16	insert "(excluding costs of teachers' quarters.)" after "place"
112	5.74	8	line should read: "three practical subjects. We doubt..."
120	5.94	14	"development of" should read "development or"
146	6.55	8	"5 000" should read "75 000"
146	6.56		insert heading "Future Supply" after paragraph 6.56
147	6.59	6	change "differential" to "higher"
159	6.98	18	insert "unless the training is at Government's request." after "full pay"
170	7.22	10	insert "for common elements" after "joint courses"
187	8.07	16	"trend" should read "tend"
203	8.51	23	insert "as" at end of line after "acting"
230			fourth line from top of page: insert "and 8.33-8.36)" after "5.87"

APPENDICIES

APPENDIX A

Statistical Appendix

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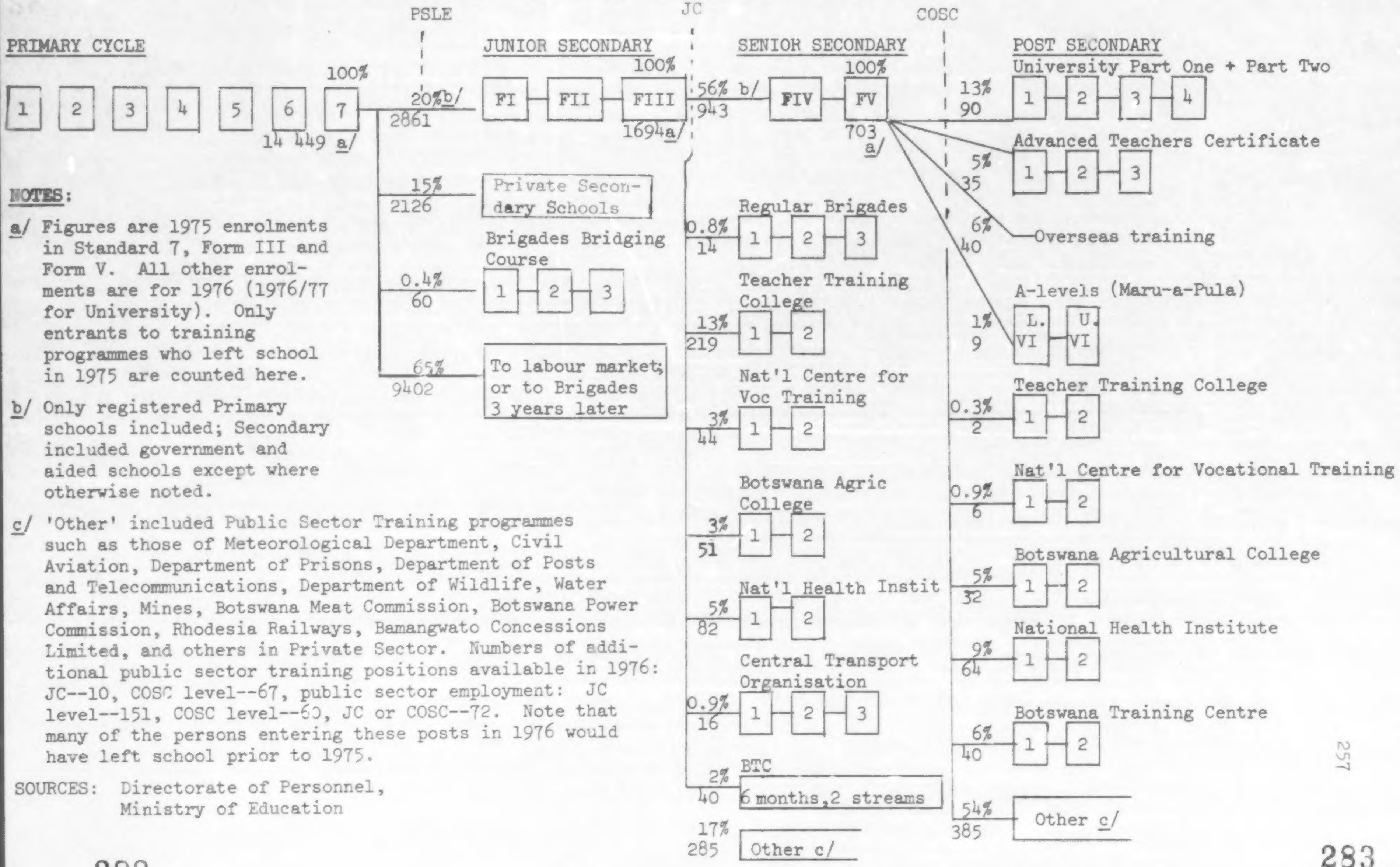
STUDENT FLOW CHART: 1976 PLACEMENTS


PSLE
JC
COSC
PRIMARY CYCLE
1 2 3 4 5 6 7
100%
14 449 a/
JUNIOR SECONDARY
20% b/
2861
FI FII FIII
100%
1694 a/
15%
2126
Private Secondary Schools
Brigades Bridging Course
0.4%
60
1 2 3
65%
9402
To labour market; or to Brigades 3 years later
SENIOR SECONDARY
56% b/
943
FIV FV
100%
703 a/
Regular Brigades
0.8%
14
1 2 3
Teacher Training College
13%
219
1 2
Nat'l Centre for Voc Training
3%
44
1 2
Botswana Agric College
3%
51
1 2
Nat'l Health Instit
5%
82
1 2
Central Transport Organisation
0.9%
16
1 2 3
BTC
2%
40
6 months, 2 streams
17%
285
Other c/
POST SECONDARY
University Part One + Part Two
13%
90
1 2 3 4
Advanced Teachers Certificate
5%
35
1 2 3
6%
40
Overseas training
A-levels (Maru-a-Pula)
1%
9
L. VI
U. VI
Teacher Training College
0.3%
2
1 2
Nat'l Centre for Vocational Training
0.9%
6
1 2
Botswana Agricultural College
5%
32
1 2
National Health Institute
9%
64
1 2
Botswana Training Centre
6%
40
1 2
54%
385
Other c/

NOTES:

a/ Figures are 1975 enrolments in Standard 7, Form III and Form V. All other enrolments are for 1976 (1976/77 for University). Only entrants to training programmes who left school in 1975 are counted here.

b/ Only registered Primary schools included; Secondary included government and aided schools except where otherwise noted.

c/ 'Other' included Public Sector Training programmes such as those of Meteorological Department, Civil Aviation, Department of Prisons, Department of Posts and Telecommunications, Department of Wildlife, Water Affairs, Mines, Botswana Meat Commission, Botswana Power Commission, Rhodesia Railways, Bamangwato Concessions Limited, and others in Private Sector. Numbers of additional public sector training positions available in 1976: JC--10, COSC level--67, public sector employment: JC level--151, COSC level--60, JC or COSC--72. Note that many of the persons entering these posts in 1976 would have left school prior to 1975.

SOURCES: Directorate of Personnel,
Ministry of Education

EXPECTED SUPPLY AND DEMAND FOR SKILLED AND EDUCATED WORKERS BY 1988, ASSUMING CURRENT POLICIES

	Standard 7	Forms I and II	Forms III and IV	Form V and UBS Part I	Degree	Total Form I and above
1. Annual outputs (1981 and onwards)	21 006[a]	237[b]	1 958[c]	1 235[d] (Form V)	133	3 563
2. Total demand in 1988	6 839	2 299	24 215	7 705	2 395	36 614
3. Batswana remaining in 1988 from 1972 workforce[e]	1 560	520	4 920	880	140	6 460
4. Additions from Education[f] 1972-1987	[g]	2 288	18 890	9 550	2 090	32 818
5. Total supply in 1988 (row 3 + 4)	[g]	2 808	23 810	10 430	2 230	39 278
6. Surplus or deficit (row 5 - 2)	+	+509	-405	+2 725	-165	+2664

Notes:
- (a) Standard 7 enrolment less repeaters and Form I enrolment in public schools.
- (b) Form I and II leavers not continuing.
- (c) Form III and IV leavers not continuing.
- (d) Form V enrolments including those who will continue.
- (e) Mortality rate based upon life tables for the Botswana population, applied separately for each five year age group. Retirement age of 60 used. See 'Manpower and Employment in Botswana', 1973.
- (f) Calculated from projected enrolments in all types of schools, with adjustment for participation rates in the labour force.
- (g) Supply of Primary leavers far in excess of demand; not possible to estimate how many will be employed in these jobs, but no supply deficiency expected.

SOURCE: Fourth National Development Plan and calculations of National Commission on Education

TRENDS IN PRIMARY EDUCATION 1966-1976

Year	Number of Registered Schools	Number of Class Rooms	Number of Classes	Number of Teachers	Number of Pupils	Average Pupil/Teacher Ratio
1966	251	NA	NA	1 673	71 546	1:43
1967	251	NA	1 674	1 713	71 577	1:42
1968	257	1 241	1 767	1 791	78 963	1:44
1969	280	1 305	2 015	2 037	82 214	1:40
1970	282	1 442	2 252	2 275	83 002	1:36
1971	288	1 519	2 412	2 404	78 442	1:33
1972	294	1 479	2 437	2 467	81 662	1:34
1973	308	1 748	2 886	2 698	95 511	1:35
1974	316	1 847	3 193	3 047	103 711	1:34
1975	323	2 003	3 579	3 509	116 293	1:33
1976	335	2 271	3 918	3 921	125 588	1:32

Note: NA means data not available.

SOURCES: 1966-1972 Third National Development Plan
1973-1976 Education Statistics
1977-1981 Fourth National Development Plan

Appendix A-

PRIMARY SCHOOL ENROLMENTS, TOTAL AND BY STANDARD, 1966-1976

YEAR	STANDARD							TOTAL
	1	2	3	4	5	6	7	
1966	20 616	13 827	12 153	9 003	6 582	4 751	4 614	71 546
1967	16 992	15 023	12 195	9 412	7 059	5 503	5 393	71 577
1968	17 825	15 944	14 093	11 139	8 464	6 477	5 021	78 963
1969	14 740	16 813	14 955	12 708	9 877	7 503	5 618	82 214
1970	12 721	13 816	15 816	13 569	11 377	8 790	6 913	83 002
1971	10 474	11 595	12 582	13 971	11 806	9 898	8 116	78 442
1972	13 506	10 735	11 655	12 147	12 966	10 904	9 749	81 662
1973	21 509	14 349	11 591	11 862	11 929	12 269	12 002	95 511
1974	20 756	20 846	14 256	11 367	11 372	11 303	13 811	101 711
1975	25 414	20 511	20 309	13 877	10 893	10 840	14 449	116 293
1976	23 833	24 795	20 247	19 491	13 211	10 409	13 602	125 588

Note: Includes only Government, Aided and Private Primary Schools which are registered. Rough estimates by the Commission indicate that perhaps 5 000 pupils may be enrolled in unregistered Primary schools.

SOURCE: Education Statistics 1966-1976

RETENTION RATES FOR PRIMARY SCHOOL ENTERING COHORTS 1966-1976

Cohort entering in:	1966	1967[a]	1968	1969	1970
Completing Standard 7 in:	1972	1973	1974	1975	1976
Entering enrolment [b]	20 616	16 992	17 825	14 740	12 721
Percent of cohort remaining in: Standard 1	100.0%	100.0%	100.0%	100.0%	100.0%
Standard 2	72.9	93.8	94.3	93.7	91.1
Standard 3	68.4	88.0	88.7	85.4	91.6
Standard 4	61.6	79.9	78.4	82.4	93.2
Standard 5	55.2	69.5	72.7	80.9	89.4
Standard 6	48.0	64.2	68.8	76.7	85.2
Standard 7 [c]	47.3	63.1	65.4	77.1	82.5

Notes:

[a] A policy of automatic promotion was instituted in 1967, increasing retention rates substantially.

[b] Entering enrolment declined during the period due to severe drought conditions.

[c] In 1967 and later years, substantial repetition was allowed. The retention rates shown are based upon Standard 7 enrolment, excluding repeaters.

SOURCE: Education Statistics and Education Reports

Appendix A-6

PROJECTED PRIMARY SCHOOL ENROLMENTS, 1976-1985

YEAR	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Standard 1	23 833	23 689	21 626	22 562	26 916	27 391	28 752	30 469	32 275	34 170
Standard 2	24 795	23 356	23 215	21 193	22 111	26 378	26 843	28 177	29 860	31 630
Standard 3	20 247	24 299	22 889	22 751	20 769	21 669	25 850	26 306	27 613	29 263
Standard 4	19 491	19 640	23 570	22 202	22 068	20 146	21 019	25 075	25 517	26 785
Repetition, Standard 4	--	--	--	--	5 273	5 241	4 785	5 003	5 968	6 073
Standard 5	13 211	19 101	19 247	23 097	16 318	21 229	19 786	19 995	23 183	24 425
Standard 6	10 409	12 815	18 528	18 670	22 404	15 829	20 592	19 192	19 395	22 488
Standard 7	10 495	10 097	12 431	17 972	18 110	21 732	15 354	19 974	18 616	18 813
Repetition, Standard 7	3 107	2 624	2 524	3 108	4 495	4 528	5 433	3 839	4 994	4 654
Total enrolment	125 588	135 621	144 030	151 555	158 462	164 143	168 414	178 030	187 421	198 301

Notes: (a) Figures for 1976 are actual.

(b) Wastage rates: Standard 1-2 2% Standard 2-3 2% Standard 3-4 3%
Standard 4-5 2% Standard 5-6 3% Standard 6-7 3%

(c) Repetition at Standard 4 begins in 1980 at a rate of 25% of previous year's enrolment, using a 5% wastage rate. Repetition at Standard 7 is 25% of previous year's enrolment.

SOURCE: Ministry of Finance and Development Planning, for National Commission on Education

ASSUMPTIONS AND NOTES, TABLE A-6

1 Year	2 Population aged 6-9 years	3 Enrolment Ratio	4 Primary enrolment aged 6-9 years (columns 2 x 3)	5 Primary enrolment of previous year aged 6-9 x 0.715	6 Standard 1 enrolment aged 6-9 years (column 4 - column 5)	7 Allowance for enrolment -6 and +9 (%)	8 Total Standard 1 enrolment
1976	85 913	0.76	65 168	43 203	21 965	+8.5	23 833
1977	87 005	0.79	68 734	46 595	22 139	+7.0	23 689
1978	88 197	0.80	70 557	49 145	21 412	+1.0	21 626
1979	89 861	0.81	72 787	50 448	22 339	+1.0	22 562
1980	91 971	0.85	78 175	52 043	26 132	+3.0	26 916
1981	95 420	0.87	83 015	55 895	27 120	+1.0	27 391
1982	98 998	0.89	88 108	59 356	28 752	----	28 752
1983	102 710	0.91	93 466	62 997	30 469	----	30 469
1984	106 562	0.93	99 103	66 828	32 275	----	32 275
1985	110 557	0.95	105 029	70 859	34 170	----	34 170

Notes: (a) Figures for 1976 are actual.

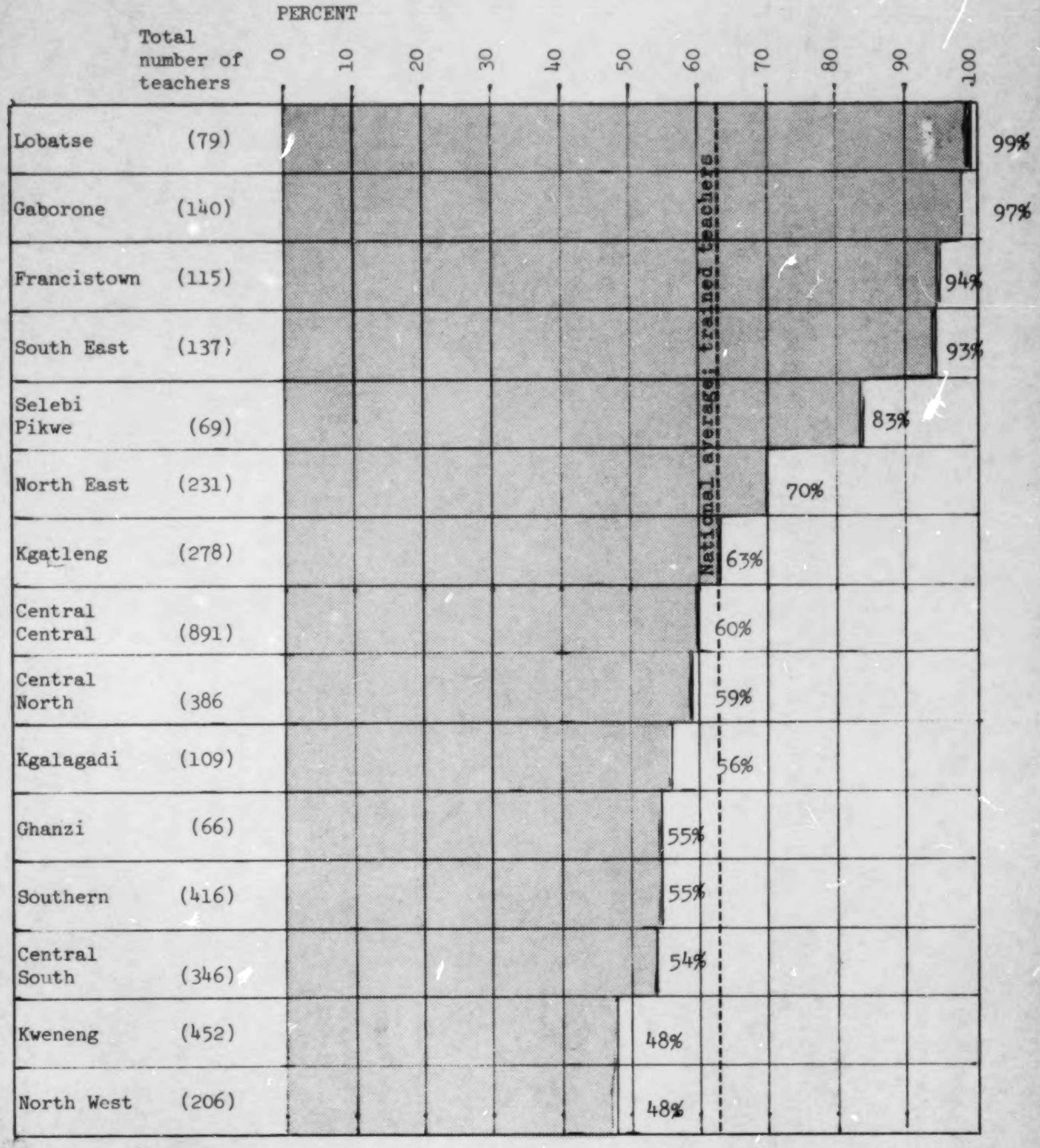
(b) Column 5: factor of 0.715 represents pupils aged 7-9 years in current year; i.e. 27 percent have become aged 10 years, 2 percent have dropped out.

(c) Column 7 assumes that as from 1978 no pupils under the age of 6 years as at January 1 allowed to enrol in Standard 1; as from 1982 no pupils over the age of 9 years as at January 1 allowed to enrol in Standard 1.

SOURCE: Ministry of Finance and Development Planning, for National Commission on Education

Appendix A-7

PERCENTAGE OF TRAINED PRIMARY SCHOOL TEACHERS BY DISTRICT, 1976



SOURCE: Education Statistics

Appendix A-8

TREND IN QUALIFICATIONS OF PRIMARY SCHOOL TEACHERS, 1966-1976

	TRAINED			UNTRAINED			TOTAL	
YEAR	Number Trained	Portion with ETC		Number Untrained	Portion with only Standard 7		Total Number	Percent Untrained
		Number	Percent		Number	Percent		
1966	947	161	17	726	661	91	1 673	43
1967	1 029	185	18	684	622	91	1 713	40
1968	1 114	217	25	677	616	91	1 791	38
1969	1 228	228	19	809	752	93	2 037	40
1970	1 344	249	19	931	875	94	2 275	41
1971	1 448	253	17	956	899	94	2 404	40
1972	1 693	482	28	774	716	93	2 467	31
1973	1 950	694	36	748	684	91	2 698	28
1974	2 053	702	34	994	884	89	3 047	33
1975	2 231	703	32	1 278	1 098	86	3 509	36
1976	2 434	698	39	1 487	1 204	81	3 921	38

SOURCE: Education Statistics and Education Reports, 1966-1976

Appendix A-9

RATES OF PRIMARY TEACHER TURNOVER, 1972/73 THROUGH 1975/76

(a) TREND IN TEACHER TURNOVER

Period	Proportion of teachers who did not return to teach in same school
1972/73	35 percent
1973/74	26 percent
1974/75	30 percent
1975/76	29 percent

(b) TEACHER TURNOVER BY DISTRICT

District	Average annual turnover
Central	28.7
Ghanzi	42.3
Kgalagadi	31.3
Kweneng	31.0
North East	37.3
North West	29.3
South East	22.8
Southern	29.9
Francistown	18.7
Gaborone	37.7
Lobatse	not in sample
Selebi Pikwe	27.1
ALL SCHOOLS	29.9

(d) TEACHER TURNOVER BY PERCENTAGE UNTRAINED TEACHERS IN SCHOOL

Percentage untrained teachers-%	Average annual turnover-%
0-20	28.6
21-40	32.2
41-60	30.6
61-80	25.8
TOTAL	29.9

(c) TEACHER TURNOVER BY COMMUNITY SIZE

Community size	Average annual turnover
town	27.4
district headquarters	27.4
medium village	30.1
small village	34.2
TOTAL	29.9

NOTES:

Data based upon a national stratified random sample of 37 primary schools.

"Rate of turnover" is defined as proportion of teachers serving in each school in a particular year who did not return to that school the succeeding year. Note than many of these would have transferred to other schools.

SOURCES:

Headteachers returns, Central Statistics Unit, and analyses by National Commission on Education.

Appendix A-10

JUNIOR SECONDARY ENROLMENT IN UNAIDED SECONDARY SCHOOLS AND CONTINUATION CLASSES, 1968-1976

YEAR	FORMS			TOTAL
	I	II	III	
1968	270			270
1969	150	174		324
1970	281	173	95	549
1971	274	231	139	644
1972	1 000	456	243	1 725
1973	1 083	973	555	2 611
1974	1 487	1 058	708	3 253
1975	1 483	1 338	817	3 638
1976	2 126	1 297	959	4 382

Note: Data on the unaided secondary schools were incomplete in the years prior to 1973. It was estimated in the Third National Development Plan that 1 000 students were enrolled, in addition to those shown, in 1971 and 1 200 students in 1972. Coverage is more nearly complete from 1973.

SOURCES: 1968-1972 Third National Development Plan
1973-1978 Education Statistics

Appendix A-11

NATIONALITY AND TERMS OF SERVICE OF SECONDARY SCHOOL TEACHING FORCE, 1976

NATIONALITY	TERMS OF SERVICE [a]				TOTAL	
	Permanent	Temporary	Contract	Volunteer		
Batswana	101	12	---	---	113	26%
Rhodesian		51	26	---	77	17%
South African		6	17	---	23	5%
Other expatriate		36	94	100	230	52%
TOTAL	101	105	137	100	443	(100%)
	(23%)	(24%)	(31%)	(23%)		

Notes: a/ Breakdown by terms of service is reported by Secondary School Headmasters.

b. With establishment of Unified Teaching Service, as of April 1976, all expatriate teachers were required to choose either temporary or contract status. Permanent status for expatriate teachers was thereafter eliminated.

Teaching force in unaided secondary schools not included.

SOURCE: Education Statistics, 1976

Appendix A-12

TREND IN VOCATIONAL AND TECHNICAL ENROLMENT, 1969-1976

	AGRICULTURAL		TRADES TRAINING		NURSING	HOMECRAFT HANDICRAFT	TOTAL
YEAR	Institutional	Brigades	Institutional	Brigades			
1969	76	103	79	381	170	82	891
1970	100	86	97	394	235	97	1 009
1971	112	78	74	481	244	188	1 177
1972	95	100	77	601	226	200	1 299
1973	115	49	54	788	347	168	1 521
1974	95	99	121	657	405	151	1 528
1975	106	50	249	698	385	211	1 699
1976	111	38	99	864	438	172	1 722

Note: Training for the public service, specifically secretarial and commercial training at Botswana Training Centre, not included. Due to differences in data gathering times and some differences in coverage, figures for Brigades trainees do not agree with data presented in Annex 3.

SOURCE: 1969-1974 Dennis Grose, Ministry of Education
1975-1976 Education Statistics

Appendix A-13

PROJECTED SUPPLY OF AND DEMAND FOR JC LEAVERS FOR POST JC-LEVEL TRAINING, 1977-1981

(Assuming current policies)

Table A: Projected JC Passes

		1976	1977	1978	1979	1980	1981
1.	Form III enrolment(a)	2 217	2 618	2 662	2 732	2 835	2 965
2.	First class JC passes	266	314	319	327	340	356
3.	Second class JC passes	1 064	1 257	1 278	1 311	1 361	1 423
4.	(Subtotal: First and second passes)	1 330	1 571	1 597	1 458	1 701	1 779
5.	Third class JC passes	665	785	799	999	851	890
6.	TOTAL PASS	1 995	2 356	2 396	2 457	2 552	2 669

Notes: (a) As projected in the Fourth National Development Plan.
(b) Assumed pass rates: First--12%, Second--48%, Third--30%. All pass--90%. Rates based upon recent years' actual pass rates.

Table B: Enrolment Requirements in Post JC-Level Training

7.	Teacher training college input	315	435	450	450	450
8.	National Health Institute	100	100	220	220	220
9.	Botswana Agricultural College (approx)	60	60	105	105	105
10.	Form IV	1 108	1 288	1 300	1 300	1 300
11.	National Centre for Vocational Training (including Central Transport Organisation)	61	59	51	59	60
12.	Botswana Training Centre (estimated)	40	40	20	20	20
13.	Total enrolment requirements in post-JC training	1 684	1 982	2 146	2 154	2 155

Notes: (a) Form III enrolments in year (X) provide inputs to training in year (X + 1).
(b) Teacher Training College and Form IV enrolment projections as in Fourth National Development Plan.
(c) Other projections based on estimates by programme directors.

Table C: Availability of JC Leavers for Teacher Training College by Qualifications

First and Second class passes among previous year's JCs remaining after:

14.	Form IV admission (line 4-10)	222	283	297	158	401
15.	After BAC and NHI admission (a) (remaining to TTC and others)	62	63	nil	nil	76
16.	Number of third class passes and untrained teachers to be enrolled in TTC to meet planned enrolment targets (line 7-15)	253	372	450	450	374
17.	Third class passes and untrained teachers as percentage of TTC enrolment target. (line 16÷7)	80%	86%	100%	100%	83%

Note: (a) These calculations assume that Form IV, Botswana Agricultural College and National Health Institute continue to enrol top JC candidates.

Appendix A-14

SUPPLY OF AND DEMAND FOR SECONDARY SCHOOL COMPLETERS FOR POST-SECONDARY TRAINING

(assuming current policies)

		1976	1977	1978	1979	1980	1981
Part A: Output of Secondary Completers							
1.	Form V enrolment [a]	867	872	1 064	1 236	1 248	1 248
2.	Division 1 or 2 Cambridge passes [b]	173	174	266	309	374	374
3.	Division 3 passes [c]	286	288	372	433	500	500
Part B: Post-Secondary Training Intake Requirements							
4.	University degree programmes [d]		160	180	200	220	240
5.	Teacher Certificate programmes		35	70	70	70	70
6.	Nursing, National Health Institute		85	85	150	150	150
7.	Botswana Agricultural College diploma		25	25	25	40	40
8.	Botswana Training Centre		40	40	20	20	20
9.	TOTAL Intake Demand (sum, lines 4 through 8)		345	400	465	500	520
10.	Priority Demand for Division 1 and 2 passes (Univiversity + NHI; 4 + 6)[e]		245	265	350	370	390
Part 3: Output: Intake Relationships							
11.	Division 1 and 2 passes for intake (line 2 in previous year)		173	174	266	309	374
12.	Shortfall of Division 1 and 2 passes (line 10 minus line 11)		(72)	(91)	(84)	(61)	(16)
13.	Demand for Division 3 passes (sum, lines 5, 7, 8 and 12)		172	226	199	191	146
14.	Remaining Division 3 passes for other training[f] and work (line 3 in previous year minus line 13)		114	62	173	242	354

Notes: Appendix A-14

(a) Enrolment as projected in Fourth National Development Plan.
(b) Assumed pass rates: 1976 and 1977--20%, 1978 and 1979--25%, 1980 and 1981--30%.
(c) Assumed pass rates: 1976 and 1977--33%, 1978 and 1979--35%, 1980 and 1981--40%.
(d) Includes degree training overseas.
(e) In practice, enrolment targets for University and National Health Institute are reduced to meet available supply of Division 1 and 2 passes; students with Division 3 passes are not accepted simply to meet targeted intake.
(f) Other training programmes accepting Division 3 passes include Central Transport Organisation, Teacher Training College, and National Centre for Vocational Training, as well as public and private sector employment and training.

A two-year National Service Scheme instituted for Form V leavers in any year would require post-secondary training programmes to admit mature age entrants in the following two years.

SOURCE: Fourth National Development Plan and National Commission on Education

Appendix A-15

TREND IN TEACHER TRAINING ENROLMENTS, 1973-1976

Year	First year	Second year	Total enrolment	Completers Actually Entering Teaching Force [a]	
				NUMBER	PERCENT
1973	206	124	330	--	--
1974	248	188	436	116	94
1975	256	233	489	178	95
1976	351	237	588	217	93

[a] Teacher Training College leavers in post in July following completion of TTC course. Percentages refer to those actually teaching as a proportion of second year enrolment in previous year.

SOURCE: Information supplied by colleges to National Commission on Education, July 1976. Note that data differ in some cases from data reported in Education Statistics.

Appendix A-16

SOURCES OF TEACHER TRAINING COLLEGE ENTRANTS[a], 1973-1976

	First Class JC pass		Second Class JC pass		Third Class JC pass		Mature Entry		Cambridge O level		Total
	No	%	No	%	No	%	No	%	No	%	Total
1973	1	1	42	20	136	65	31	15	1	1	211
1974	0	0	18	7	143	56	93	36	3	1	257
1975	2	1	14	5	174	63	83	30	2	1	275
1976	0	0	27	7	223	58	130	34	2	1	382

[a] Some mature age entrants, most of whom had been teaching as untrained teachers, were double counted as Second and Third Class Junior Certificate passes. The total first year enrolment is therefore greater than first year enrolment shown in Appendix A-13.

SOURCE: Information supplied to National Commission on Education, July 1976. Note that data differ in some cases from data reported in Education Statistics.

RATES OF SECONDARY TEACHER TURNOVER, BY SCHOOL, BY EXPATRIATE AND BATSWANA TEACHERS 1972/73 THROUGH 1975/76

(percentage turnover)

	1972/73		1973/74		1974/75		1975/76		TOTAL		Total all Teachers %
	Expats	Batswana	Expats	Batswana	Expats	Batswana	Expats	Batswana	Expats	Batswana	
Gaborone	56	44	39	18	48	54	35	7	44	30	40
Kgari Sechele	21	40	58	25	33	40	39	25	39	32	37
Lobatse	--	50	38	--	31	75	39	25	31	43	33
Moeng	53	--	38	--	13	67	50	33	38	38	38
Molefi	41	17	29	33	48	43	59	13	44	26	40
Seepapitso	39	100	25	50	48	33	21	50	33	54	36
Selebi Pikwe	--	--	--	--	60	--	17	25	36	20	31
Tutume	40	--	11	--	38	50	33	33	31	25	30
Shashe River	65	67	53	40	67	75	32	25	54	50	53
Swaneng	51	67	42	100	52	40	42	38	47	59	49
Madiba	33	--	56	50	50	33	23	--	39	25	35
Mater Spei	53	67	40	--	36	--	58	14	48	19	43
Maun	60	--	60	--	53	50	8	--	44	13	39
Moeding	50	100	18	--	47	--	42	14	39	18	35
St. Joseph's	45	75	36	100	35	100	46	--	40	11	42
TOTAL	47	48	39	31	44	44	39	20	42	34	40
TOTAL ALL TEACHERS	47		37		44		35		40		

Note: 'Rate of Turnover' is defined as the proportion of teachers serving in each school in a particular year who did not return to that school the succeeding year. This is not the same as a 'wastage rate' since some turnover is due to transfers between schools, absence on training courses, or other temporary withdrawal.

SOURCE: Headmaster Returns, Central Statistics Unit and National Commission on Education

BATSWANA STUDENTS ENROLLED IN DEGREE AND DIPLOMA COURSES: 1968-1976

YEAR	LOCATION						TOTAL		
	Botswana		Other African Countries		Outside Africa				
	Degree a/	Diploma b/	Degree	Diploma	Degree	Diploma	All Courses	Degree	Diploma
1968	--	--	52	25	31	13	121	83	38
1969	--	--	67	35	31	13	146	98	48
1970	--	--	93	38	47	26	204	140	64
1971	42	--	98	41	36	37	254	176	78
1972	70	--	79	51	19	43	262	168	94
1973	102	--	85	55	13	58	313	200	113
1974	153	15	80	56	12	61	377	245	132
1975	205	42	97	59	12	50	465	314	151
1976	268	76	29	95	18	51	537	315	222

Note: a/ includes students on Lesotho and Swaziland Campuses of University of Botswana, Lesotho and Swaziland.
b/ Advanced Teachers Certificate enrolment.

SOURCE: 1968-1974 Dennis Grose, Background Paper for the Commission, Ministry of Education
1975-1976 Education Statistics

SUMMARY OF TRENDS IN EXAMINATION RESULTS, 1968-1975

	PRIMARY SCHOOL LEAVING EXAMa/					JUNIOR CERTIFICATE EXAM					CAMBRIDGE SCHOOL CERTIFICATE EXAM				
	number sitting exam	PSLE GRADES				number sitting exam	total number passed	percent passed	Merit + A and B passes	Percent merit + A and B	number sitting exam	total number passes	percent passed	Division 1 and 2 passesc/	Percent Division 1 and 2
		A %	B %	C %	Db/ %										
1968	4 793	7	24	53	16	451	289	64	171	38	160	113	71	50	31
1969	5 490	4	18	62	17	525	358	68	207	40	206	152	74	69	34
1970	6 638	10	34	42	15	804	533	66	248	31	255	168	66	63	25
1971	7 941	10	34	40	16	1 119	754	67	451	40	275	185	67	77	28
1972	10 130	10	20	47	23	1 207	904	75	742	61	378	227	60	94	24
1973	11 838	11	20	47	22	1 463	1 201	82	820	56	503	240	48	77	16
1974	13 457	11	19	46	25	2 560d/	1 667	65	1 024	40	519	242	46	67	13
1975	14 111	10	20	46	23	2 355d/	1 819	77	984	42	686	371	54	121	18

Notes: a/ Includes candidates from aided and unaided primary schools.

b/ Fail

c/ Division 1 and 2 passes on the Cambridge Exam are eligible for admission to University

d/ In 1974 and 1975, data on Junior Certificate results include candidates from private secondary schools, evening and continuation classes.

SOURCE: Education Statistics

Appendix A-20

GOVERNMENT RECURRENT EXPENDITURES ON EDUCATION BY LEVEL, 1972-75

	Year	Primary[a]		Secondary (Government)[b]		Primary Teacher Training[c]		Vocational[d]		University[e] and Third Level		Administration		GRAND TOTAL, all levels = 100%
Total expenses, all items	1972	1 819 671	53%	635 442	19%	124 458	04%	103 805	03%	590 884	17%	137 958	04%	3 412 223
	1973	2 097 905	53%	700 373	18%	125 741	03%	150 236	04%	666 194	17%	212 221	05%	3 952 670
	1974	2 963 805	52%	967 890	17%	228 197	04%	296 947	05%	914 113	16%	360 006	06%	5 730 958
	1975	4 633 094	53%	1 783 096	20%	298 348		375 602	04%	1 179 897	14%	498 477	06%	8 713 676
Teachers and other salaries only	1972	1 557 052		344 797	16%	124 458	06%	72 316	03%	not reported		70 039	03%	2 168 662
	1973	1 800 143	72%	366 398	15%	125 741	05%	103 313	04%			100 312	04%	2 495 907
	1974	2 503 343	68%	593 491	16%	195 841	05%	162 983	04%			200 470	05%	3 656 128
	1975	3 970 834	69%	1 089 770	19%	242 311	04%	146 887	03%			272 065	05%	5 721 867
Enrolments	1972	81 662		2 714		302		978		364		not applicable		not applicable
	1973	95 511		3 124		345		1 037		371				
	1974	103 711		3 720		409		996		410				
	1975	116 293		5 921		489		1 176		549				
Total expenditure per student	1972	22.28	- 1	234.13	- 4	413.77	-12	106.14	+37	1 623.31	+11	not applicable		not applicable
	1973	21.97	+30	224.19	+16	364.47	+53	144.88	+106	1 795.67	+24			
	1974	28.58	+39	260.19	+16	557.94	+ 9	298.14	+ 7	2 229.54	- 4			
	1975	39.84		301.15		610.12		319.39		2 149.17				
of which: Salaries cost per student	1972	19.07	- 1	127.04	- 8	413.77	-12	73.94	+35			not applicable		not applicable
	1973	18.85	+33	117.28	+36	364.47	+32	99.63	+64					
	1974	24.14	+42	159.54	+16	478.83	+ 3	163.64	-24					
	1975	34.15		184.05		495.52		124.90						

Expenditures in Pula.

Percentages of total and of salary expenditures are percents of the grand total. In unit cost sections, percentages show year-to-year changes in unit costs. See detailed notes on accompanying page.

SOURCE: Education Statistics and National Commission on Education

These data are based upon calculations by the Central Statistics Office, published in Education Statistics, as adjusted by the Commission. They refer to reported expenditures of the Ministry of Education only (except for primary education, where District Council expenditures are included). Coverage and methodology have changed somewhat during the period shown. The more recent data tend to be more nearly complete. Comparison of unit costs by level shows Government's relative expenditure per student, by level, not differences in total costs. Data are for calendar years and thus correspond to academic years, except in the case of the University.

a/ Primary education expenditures include all Ministry of Education expenditures plus District Council expenditures and are relatively complete statements of recurrent costs. Primary enrolment includes all registered primary schools.

b/ Secondary education expenditures shown exclude grants and teachers' salaries for aided schools. Enrolment includes only Government secondary schools.

c/ Teacher training expenditures shown cover mainly the salary expenses of Teacher Training Colleges. Students training allowances are included here rather than under primary.

Notes for Appendix A-20

d/ Vocational education includes the National Centre for Vocational Training, that portion of Brigades' expenditure paid by Government, and Botswana Training Centre through Financial Year 1974-75. Botswana Training Centre transferred to Directorate of Personnel after 1 April 1975. National Centre for Vocational Training began operation in 1974.

Breakdown of recurrent Ministry of Education expenditures on vocational training, 1975

	Brigades	NCVT
Total expenditure	78 554	246 255
Salaries only	1 436	113 639
Enrolment	927	249
Unit cost total	84.74	988.98
Unit cost salaries	1.55	456.38

e/ University level includes main grant from Ministry of Education to the University and bursaries payments. No information on salary expenditures available separately thus unit salary costs cannot be calculated. Enrolment includes all Batswana students enrolled at UBLS and UBS, plus students in foreign universities and diploma courses, plus Teachers Certificate enrollees.

Appendix A-21

ESTIMATED RECURRENT AND CAPITAL COSTS PER STUDENT PER YEAR, PRIMARY AND SECONDARY SCHOOLS FINANCIAL YEAR 1976-77 (in pula)

	Recurrent expenditure per pupil per year a/	Estimated Annual Capital Cost per Student b/			Total cost per place per year c/
		Day students	Boarding students	Boarding plus full staff housing	
Primary pupils	45	8	---	---	53
Junior Secondary:					
Day	387	47	---	---	434
Boarding	485	---	100	135	585
Senior Secondary:					
Day	398	63	---	---	461
Boarding	487	---	117	162	604
Weighted average (day and boarding students, recurrent only) d/					
Junior Secondary	440				
Senior Secondary	450				

a/ Recurrent costs are based upon an analysis of recurrent estimates for Financial Year 1976-77 and detailed estimates and financial accounts for individual Government secondary schools. Estimates were prepared by the Commission Secretariat. Attempts have been made to include all costs and to allocate administrative and headquarters costs to primary and secondary schools, which results in substantially higher estimates of recurrent costs than those shown in Appendix A-20.

b/ Capital costs per student place have been estimated on the basis of cost data prepared for the World Bank education loan project and represent the capital costs for new facilities as of 1976-77. They assume schools of 12 classes; 40 junior secondary and 30 senior secondary students per class; 40 year life for construction and 10 year life for furniture and equipment. Costs of purely day secondary schools, full boarding schools, and full boarding, plus full staff housing are shown.

c/ Total costs include recurrent costs for day and boarding students and the respective capital costs per student year. The cost model including staff housing is not included in this column.

d/ Average capital costs cannot be calculated for all students. The method of cost calculation used does not permit clear differentiation between junior and senior secondary recurrent costs.

SOURCE: National Commission on Education

DISTRIBUTION OF RURAL HOUSEHOLD INCOMES

Percentile of Households	Annual Household Income	Accumulated Share of all Household Incomes
5	182	0.7
10	233	1.6
20	325	4.3
30	402	7.7
40	507	12.0
50	630	17.4
60	798	24.0
70	954	32.1
80	1 068	42.4
90	1 335	58.0
95	2 094	70.1

Note: Forty five percent of rural households had incomes at or below the poverty datum line, which was calculated separately for individual familites based on age and sex composition of household. For example, a household with a male age 18-54, female 18-54, male 16, female 10 and female 2 would have a poverty datum line of P555. A six member household with an additional female over 55 years would have a poverty datum line of P679.

SOURCE: Based on a survey of 1 800 rural households, representing an estimated 93 000 households in rural areas, conducted in 1974-75. Rural Income Distribution Survey, 1976, p 84 and Appendix 15, pp 211-223.

APPENDIX B

List of Submissions to the National Commission

SCHOOLS, TEACHERS AND EDUCATIONAL ASSOCIATIONS

Students, Tutume Community College

Teaching Staff, Lobatse Secondary School

Botswana Teaching Staff, Madiba Educational Training Centre

Mahalapye Teachers Committee

Teaching Staff, Ramokgonami Primary School

Teachers and Parents, South East District

Teaching Staff, Swaneng Hill School

Faculty of Economic and Social Studies, University College of Botswana/University of Botswana and Swaziland (UCB/UBS)

Faculty of Education, UCB/UBS

Faculty of Science, UCB/UBS

Division of Extra Mural Services, UCB/UBS

Headmaster, Kgari Sechele Secondary School

Headmaster, Maun Secondary School

Headmaster, Molefi Secondary School

Headmaster, Northside Primary School

Principal, Madiba Educational Training Centre

Principal, Moeding College

Principal, National Centre for Vocational Training

Principal, St. Joseph's College

Rector, UCB/UBS

Principal, Francistown Teacher Training College

Botswana Science Association

Botswana Secondary Schools Agricultural Science Panel

Commercial Subjects Panel

Development Studies Teachers Association

National Subject Panel for Woodwork and Technical Drawing

Botswana Secondary Schools Headmasters' Association

Botswana Teachers' Union

Adult Educator, Tutume Community College

Education Officer, In-Service Training, Francistown Teacher Training College

Head of Technical Department, Molefi Secondary School

Richard H. Detwiley, Lobatse Secondary School

Jorgen Oc, Lobatse Secondary School

Alexander van Rudloff, Moeding College

DISTRICT GOVERNMENT

Central District Development Committee (DDC)

Central District Council

District Commissioner, Central District

Francistown Town Council

Ghanzi District Development Committee

Kgalagadi District Development Committee

Kgatleng District Development Committee

Kweneng District Development Committee

Northern District Development Committee

District Commissioner, Southern District

Southern District Development Committee

Southern District Council

South East District Development Committee

District Commissioner and District Officer for Development, Tsabong

CENTRAL GOVERNMENT

Agricultural Extension Advisor, Ministry of Agriculture

Rural Sociologist, Ministry of Agriculture

Permanent Secretary, Ministry of Health

Commissioner of Handicapped, Ministry of Health

Education Officer, Gaborone, Ministry of Education

Planning Officer I, Ministry of Education

Bursaries Secretary, Ministry of Education

Director In-Service Project, Ministry of Education

Educational Broadcasting Unit, Ministry of Education

Rural Development Advisor, Ministry of Finance and Development Planning

Chief Training Officer, Department of Water Affairs

Acting Deputy Director and Senior Chemist, Department of Geological Survey

VOLUNTARY AND PRIVATE ORGANISATIONS

Anglican Diocese of Botswana

Botswana Council of Women

Botswana Employers' Federation

Botswana Young Womens' Christian Association

Education Committee, United Congregational Church of Southern Africa

International Federation, Business and Professional Women

Mennonite Central Committee

Roman Catholic Diocese of Botswana

Secretary, Mochudi Museum Committee

Seventh-Day Adventist Church

OTHER INDIVIDUALS AND GROUPS

Curator of Education, National Museum and Art Gallery

Engineer/Manager, Water Utilities Corporation

V.J. Ashworth

Sue Austin

S.T. Coangae

Ambassador A.M. Dambe (personal statement)

W.L. Dickson

Janet Hermans

Ulla Kann

Sethoni M. Madikwe

P.T. Moalosi

Sebotho Modisi

M. Karlmon Mogalakwe

M.J. Mtutuki

J.O.M. Nkoane

J.F. Ramsden

Patrick Van Rensburg

K.K. Sechele

Moffat Sibanda

Arthur Syred.

APPENDIX C

List of Hearings Held by the Commission

During its travels throughout Botswana, the Commission heard evidence presented by representatives of central government agencies, local governments, educational institutions, voluntary and religious organisations, and others. A list of the organisations, institutions and agencies represented at these hearings is presented in this Appendix.

COMMITTEES AND EDUCATIONAL ASSOCIATIONS

Executive Committee, Botswana Teachers Union

National Committee on Educational Policy

Rural Extension Coordinating Committee and its Non-formal Education Sub-committee

Primary Curriculum Task Force

Secondary Curriculum Task Force

Secondary School Headmasters Association

ad hoc Committee of Members of Parliament

ad hoc Committee of representatives of agencies sponsoring volunteers in Botswana

CENTRAL GOVERNMENT AGENCIES

Director of Personnel and staff

Director, Information Services

Ministry of Agriculture

Agricultural Information Officer

Director of Field Services

Director of 4-B Programmes

Extension Advisor

Rural Development Consultant

Rural Sociologist

Staff Training Coordinator

Ministry of Commerce and Industry

Director and Staff, Botswana Enterprise Development Unit

Ministry of Education

- Permanent Secretary
- Deputy Permanent Secretary
- Director Unified Teaching Service
- Planning Unit
- Chief Education Officers for Primary, Secondary and Technical Education and Teacher Training
- Finance Officer
- Director In-Service Team
- Secondary School Inspectors/Advisors
- Brigades Unit
- Bursaries Secretary
- Education Officers and/or Assistant Education Officers in every District
- Educational Broadcasting Unit
- Boipelego Education Project
- Director and staff, Regional Testing Centre

Ministry of Finance and Development Planning

- Permanent Secretary
- Director of Economic Affairs
- Senior Planning Officer, Education and social sectors
- Planning Officers, Education and Local Government
- Manpower Advisor
- Economic Consultant
- Coordinator of Rural Development
- Rural Development Advisor
- Government Statistician
- Senior Statistics Officer, Education

Ministry of Health

- Health Education Unit

Ministry of Home Affairs

- Botswana National Library Service
- Director and Curator of Education, National Museum

Ministry of Local Government and Lands

Permanent Secretary
Senior Planning Officer , Planning Officer
Assistant Secretary, Social and Community Development
Community Development Officer
Youth Affairs Officer
Extra-Rural Development Officer
Media Coordinator, Tribal Grazing Lands Consultation

LOCAL GOVERNMENTS

The Commission travelled to all districts and the four Towns in the course of its investigations. Members of the Commission held meetings with representatives of District Councils, Council Education Committees and District Development Committees, Education Secretaries and/or District Officers (Development) representing:

- Central District
- Ghansi District
- Kgalagadi District
- Kgatleng District
- Kweneng District
- Northeast District
- Southeast District
- Southern District

- Gaborone Town Council
- Francistown Town Council
- Lobatse Town Council

EDUCATIONAL INSTITUTIONS

University College of Botswana, University of Botswana and Swaziland

- Faculty of Education
- Faculty of Humanities
- Faculty of Science
- Division of Extra-Mural Services

Teacher Training Colleges

Principals and staff of:

- Francistown Teacher Training College
- Lobatse Teacher Training College
- Serowe Teacher Training College

Secondary Schools

The Commission visited and held meetings with Headmasters, staff and, in many cases, students of

- All Government Secondary Schools
- All Aided Secondary Schools
- Private Secondary Schools
  - Linchwe II Secondary School
  - Maru-A-Pula School
  - Setlalekgosi Secondary School
  - Ipeleleng Secondary School
  - Itekeng Ghansi Secondary School
  - Itereleng Secondary School
  - Ramotswa Secondary School

Primary Schools

Members of the Commission visited many primary schools in every district and town.

Other Educational Institutions

- Botswana Agricultural College
- Botswana Extension College
- Botswana Training Centre
- Institute for Development Management
- National Centre for Vocational Training

BRIGADES

Directors/Coordinators and staff of:

- Serowe Brigades Development Trust
- Kasane Brigades Development Trust

Brigades (cont.)
Kgatleng Development Board
Kweneng Rural Development Association
Madiba Educational and Training College
Tutume Community College

VOLUNTARY AND RELIGIOUS ORGANISATIONS

Anglican Diocese of Botswana
Botswana Christian Council
Botswana Council of Women
Botswana Red Cross Society
Catholic Diocese of Botswana
Congregationalist Church of Botswana
Mennonite Central Committee
Young Women's Christian Association

OTHER ORGANISATIONS/FIRMS

Botswana Employers Federation
Bamangwato Concessions Ltd., Training Division

The Commission's consultants also visited a number of educational institutions, parastatal and private employers' training units and other organisations.

Members of the Commission attended a national Non-Formal Education Conference, Gaborone, March, 1976.

APPENDIX D

Developing a New Kind of Junior Secondary School

TRANSITION TO THE COMMISSION'S PROPOSED STRATEGY

D-01 An important aspect of the Commission's sectoral strategy is the provision of a different kind of junior secondary education to greatly increased numbers of Batswana. The Commission proposes that by 1990 Botswana should offer nine years of virtually universal education. In order to accomplish this without excessively high costs, it will be necessary to change the structure of primary and secondary eduation and to modify the nature of the junior secondary stage.

D-02 As discussed in the text, the Commission envisages the following changes:

(a) shortening the primary cycle to six years and providing a three year junior secondary cycle; thereafter, with selective entry, a three year senior secondary stage up to School Certificate level;

(b) providing day junior secondary schools in most communities in the long run, either as separate schools or as continuation sections of the present primary schools;

(c) greatly reducing the proportion of boarding students at junior secondary level through provision of day secondary schools;

(d) establishing junior secondary as an intermediate level, between primary and senior secondary, with lower-cost buildings, lower teacher-class ratios than the present junior secondary schools, and a separate category of teachers trained for two years after Senior Certificate and paid at a level intermediate between the scales of the present Primary Teachers' Certificate and Teachers' Certificate scales;

(e) development of a new curriculum and a new intermediate level examination to be taken after nine years of education.

D-03 This Appendix considers the process of transition from the present system to the proposed new one. The main questions that need to be answered are as follows:

(a) In what way, and according to what criteria and plans, will greatly increased numbers of junior secondary classroom places be created?

(b) What arrangements will be made for gradually increasing assistance to the presently-unaided junior secondary schools, and how will a programme be developed to encourage, plan and monitor the establishment of new schools built through community self-help?

(c) How will decisions be made about which junior secondary school students will attend which schools, both in the transitional period and in the longer term?

(d) How rapidly should expansion and transition take place, including phasing out the present pattern of courses?

(e) When and in what way should the structural change from a 7 - 3 - 2 system to the proposed 6 - 3 - 3 structure be made?

(f) How will the new system, curriculum and examination be developed and put into effect, and how will this be co-ordinated with the transition?

(g) How will sufficient teachers be trained, to an appropriate standard, to staff the new schools?

D-04 To most of these questions there are several alternative answers to choose from. The following paragraphs discuss the questions, the alternatives, and the Commission's views about which courses of action would be most desirable.

Provision of Needed Classroom Places and other Physical Facilities

D-05 There are several related questions in this area

(a) Who will build the classrooms, Government or local communities themselves?

(b) How will development of new schools be planned and directed?

(c) Will new places be provided in classrooms attached to existing primary schools or in separate three-year junior secondary schools?

D-06 (a) Who will build the classrooms?-A major theme in the Commission's over-all strategy is that the spirit of self-reliance should be strengthened and encouraged. The present unaided schools and continuation classes represent in most cases, examples of self-reliance in the provision of secondary education. We believe that communities should be urged to use self-help efforts in developing new junior secondary schools. Government will of course need to augment self-help by provision of building materials, approved architectural plans including plans for laboratories and other junior secondary facilities, and perhaps additional financial subsidy. It must be recognised however that even with such assistance, some communities will be unable to generate strong self-help support. In these instances, Government should be committed to provide a school eventually. The principle to be applied is that those communities in which citizens indicate a willingness to undertake self-help efforts, which organise a Board of Governors for a new school, and whose proposals correspond to local plans for the junior secondary school network should receive first priority. But the promise of a school should be held out to every community.

D-07 (b) How will development be planned and administered? - The Ministries of Local Government and Lands and of Education should establish criteria regarding establishment and location of the new schools, for the guidance of district-level planners and should provide overall policy direction. These criteria should indicate, in addition to priority for communities wishing to build their own school, what size communities should be served first, how school location should be determined, what architectural plans and construction standards should be maintained, and related matters. Development of the capacity at local level to plan for both primary and secondary expansion is highly important. The present District Development planning capability represents a valuable foundation on which to build, but physical planning for education at the District level needs to be strengthened. Ultimately it is possible that local councils and individual communities might also be given responsibility for administrative oversight of the new schools, though each would be managed by a governing board. In the shorter term development phase however we suggest that the Central Government should have responsibility for professional and material assistance.

D-08 (c) Separate schools or Continuation Classes for Primary Schools?- We suggest that the physical form which the junior secondary stage takes should depend on local conditions. In some cases it will be preferable to add classrooms to existing primary schools while in others it will be better to build a single separate junior secondary school. Much will depend on the possibility of developing a large enough junior secondary school to stand on its own. Generally this should prove possible, but in those places where for reasons of population density the junior secondary school would have to be single-stream and have only three classes, we suggest that a more viable unit might be created if it were to be formed as a junior secondary section associated with an existing primary school, so that it could draw on a shared pool of staff and facilities. In order that such outlying schools should not be at too great a disadvantage, it might be possible to operate a compensatory quota system for Form IV admission along the lines of the one we suggest for Form I admission in the short term (see paragraph 4.74). One should not anticipate that the seventh primary classroom would be available for junior secondary classes when the primary cycle is reduced to six years. Planners must bear in mind that the additional primary classroom space may be needed to provide for growing enrolment and for increased repetition at the Standard 4 level and the last year (7 or 6) of primary.

Assistance to Unaided Schools

D-09 As discussed in the text, Government should develop a programme of encouragement and support for the unaided secondary schools. The existing non-government schools represent a first group of schools that could become a part of the junior secondary network. Efforts should be made to improve the quality of the education they provide, and in most cases their facilities. Whilst most existing unaided schools would be eligible for assistance and eventual take-over, this should not be automatic and Government should lay down conditions that unaided schools must meet before receiving assistance. An officer in the Ministry of Education should be assigned responsibility for this programme, including overseeing new community-based schools as these are built. All new schools must conform with district plans in relation to their location, siting and layout.

D-10 In developing the national network of junior secondary facilities, Government will have to decide how much emphasis to put on assistance to schools started on community initiative, including those already existing in 1977, and how far to undertake the construction of new schools on its own initiative. Our own suggestion is that Government should first of all, working through local District Development Committees, draw up a plan for the future network of junior secondary schools. It should then concentrate its assistance initially on communities which can start building and operating schools within this plan, committing their own resources to cover a substantial part of the cost. The bulk of the programme in the early days should be for assistance to self-help efforts, with perhaps a very modest sum set aside for new Government junior secondary schools in areas where community efforts are deemed impossible. In order to stimulate and reward self-help effort, Government should aim to complete the absorption of schools started by self-help before making any large-scale commitment to a programme of fully-financed provision. We have indicated in chapters 5 and 9 that we anticipate that Government assistance would not at first include direct subsidisation. It would begin with provision of professional advice, encouragement and non-financial assistance, and would then gradually evolve through a stage of partial subsidisation to full cost coverage.

Assignment of Primary School Leavers to Places in Government and Aided or Community Self-help Schools

D-11 One of the most difficult qeustions concerning the transition to the new strategy is how students will be allocated to secondary schools. It will not be possible to construct school buildings and provide teachers rapidly enough to permit a single-step transition to the new structure throughout the country. The new model of junior secondary schools will have to be expanded gradually. This means, however, that in the transitional period there will still be two standards of provision of junior secondary places, less contrasting than the gap between present aided and unaided schools, but still noticeably different.

D-12 There are at least two alternative approaches to assigning students to secondary places in the "old" and "new" schools, during the period that they co-exist before junior secondary places at the "old" schools are converted to the senior level:

(a) Maintain a unitary secondary education system and assign students to all schools according to their place of origin, or,

(b) Acknowledge that the standard of quality is different in the two types of schools and assign the students with the highest scores on the Primary School Leaving Examination (PSLE) to the "old" Government and Aided schools.

D-13 The advantage of the first alternative is that it does not formalise a two-tier education system in the public sector which is contrary to the principles of unity and democracy. The difficulty is that it is virtually certain that the standards of quality will in fact differ markedly in terms of physical facilities, libraries, laboratories, quality of staff in the whole school community, and "academic atmosphere". If a child from a community that had a new day school scored very highly on the PSLE, yet was required to attend his local school in his or her home community, while other children from less progressive communities and perhaps with lower PSLE marks entered Form I in "old" schools this might well be perceived as unfair and would create resistance to the whole strategy. Attempts to raise the physical standards in "new" schools to the levels in the present secondary schools would increase costs inordinately and would thus conflict with the purpose of the strategy. While the Commission favours common standards for all students, it must be recognised that differentiation is going to be inevitable in the transitional period.

D-14 The second approach, acknowledging that there are differences in quality during the period when unaided and new community schools are still developing, would mean giving the top candidates for Form I the option of entering the Government and Aided Schools (the present 15 schools plus the six new ones being built). As more places are created in "new" schools, admission to Form I in the old schools would be progressively phased out, probably by converting two or three schools per year to exclusively senior secondary status and admitting no more Form I entrants. Although this approach involves a kind of temporary differentiation within the public sector and has the effect of underlining that the new schools are less lavishly provided than the old, the Commission concludes that this is the preferable approach. Government should consider carefully, however, whether there might be other alternative approaches, preferable to both of those we have put forward.

The Rate of Expansion and Transition

D-15 When the "wave" of primary school enrolment reaches Standard 7 in 1979 and the number of potential candidates for Form 1 places in 1980 nearly doubles, the "index of opportunity" or proportion of primary completers who win a place in Form 1 will drop below twenty percent (for entry into Government and Aided Schools). By that time it would be highly desirable to

(a) provide assistance to unaided secondary schools to enable them to improve the quality of the education they provide, and

(b) create enough junior secondary places in new day secondary schools to limit the fall in the over-all index of opportunity. Also by that time Government should have made it clear that it intends to modify the nature of junior secondary schools and to phase out the first three years in the "old" schools.

D-16 The Commission feels that, with careful efforts to control recurrent costs and to train a new cadre of junior secondary teachers, it should be possible to admit approximately 50 percent of primary school leavers to Form I by 1985; that is some 12 000 students in either the old or the new types of school. By 1990 we would hope that all junior secondary admissions would be to the new type schools. Allowing for a small proportion of children who might not wish or be able for various reasons to continue with their education after primary school, some eighty percent of primary school leavers should gain entry to the junior secondary level by 1990, (28 000).

D-17 There will inevitably be recurrent budget constraints. The development of the new form of junior secondary education must be carefully planned and monitored to assure that expansion of this level does not jeopardise development and qualitative improvement of other forms of education, particularly primary, teacher training and out-of-school education. If necessary the period of implementation of the new junior secondary policy may have to be extended. This in turn implies that expansion of this level must be subject to Government control (in a way that present expansion of primary education is not). In other words, communities should be allowed to open new day schools only in accordance with approved district physical plans; and the granting of actual material support to new community schools will have to be phased in accordance with the availability of Government budgetary resources. Despite these warnings, we consider that it should prove possible to admit 80 percent of primary school leavers by 1990 to publicly supported junior secondary schools.

Structural Change from 7-3-2- to 6-3-3

D-18 An important aspect of the proposed strategy is the shift to a six-year primary level and three-year junior and senior secondary cycles. At what stage should this take place? There are various considerations.

D-19 On the one hand, there are a number of arguments why it would be better to make the change in the early 1980s. It would allow the Ministries of Education and Local Government and Lands to plan for primary classroom needs in terms of a six year cycle plus provision for repeaters. It would make it possible to develop the new primary and junior secondary curricula and examinations in relation to the 6-3-3 structure rather than go through two changes. It would tend to conserve resources because the levels with mass enrolment would be reduced from a total of ten years to nine. And it would permit early transition to a three year Senior Certificate cycle. By 'early' transition one might be thinking in terms of, say, a shift to a six year primary system in 1981 (PSLE in both Standard 6 and 7 in that year) and the shift of junior secondary examination from the tenth grade (Form III) to the ninth grade (Junior Secondary Form 3) three years later.

D-20 On the other side there are strong arguments for making the changes more gradually and only changing to a six year primary system when access to junior secondary is more or less universal. This would give time for a real strengthening of the quality of the primary school before the course is shortened by a year and would reduce the danger of junior secondary expansion diverting energies and attention away from primary education improvement. It would avoid the necessity of temporarily cutting the universal access span from seven years to six, when the whole purpose of the new structure is eventually to lengthen the period of universal education to nine years. And one would avoid having the double output of primary leavers (from standard 6 and 7) in the same year at a time when the secondary schools were still highly selective and could accommodate very few of them. On balance therefore the Commission is inclined to favour a later shortening of the primary course.

D-21 One possibility which Government might wish to examine is that of instituting the new Junior Certificate examination at the end of the ninth year (present Form II), and introducing the three year senior secondary course at that time, before the primary course is shortened. If this could be accomplished within the next two or three years, it would help to make many more eighth and ninth year (present Forms I and II) places available for the large numbers of Standard 7 leavers emerging from the primary system in 1979 and subsequent years. The two year post-primary course would be purely transitional (lasting perhaps five to eight years) but would make the rapid expansion for Form I and II education over this period much more feasible. Any new school built in this transitional period would have to contain classroom space to cope with three junior secondary forms, ready for the day when primary school courses would be reduced to six years. But temporarily they would be able to admit 50 percent more pupils to Forms I and II, thus helping to cope with a difficult school leaver problem in the early 1980s.

D-22 There are problems with such a two stage transition, and careful thought would be needed on whether the advantages outlined above outweigh the difficulties. One problem with a 'two stage' transition is that it would cause difficulties for curriculum planning and curriculum continuity. Another is that teacher training courses would not be able to recruit sufficient numbers at senior secondary level by the early 1980s. Could they recruit from the present Form II level successfully, or would it be necessary to give candidates a tenth year of education as at present before entry to the colleges? Government must consider these questions with care and we urge that the Planning Unit begin such considerations as soon as Cabinet decides whether to adopt this stretegy.

Training Junior Secondary Teachers

D-23 The Commission has recommended that the new schools be staffed by a separate category of junior secondary teachers, trained in a two-year post-School Certificate teacher training programme. In terms of professional training and pay, such teachers would be at an intermediate level between the present University-prepared Teachers' Certificate teachers and holders of the Primary Teachers' Certificate. Depending upon the rate of expansion of junior secondary, between 50 and 100 teachers will be needed each year for the junior secondary level between 1980 and 1985, with rapid increases thereafter. This means that planning of teacher training courses to meet this demand must be undertaken in the next two or three years. It is unlikely that sufficient Form V graduates will be available until the early middle 1980s to fill these courses, even if, as we advocate, the Development Plan proposal to freeze Form IV intake from 1979 is amended to allow modest continuing expansion. We also suggest that Government should examine the possibility of asking those graduating from the University before 1984 -- in other words those who will not have done national service after Form V -- to undertake a period of service in the junior secondary schools or in other occupations. Where favourable terms can be negotiated, including three year tours of service if possible, Botswana might also look to overseas volunteers to help meet the short-term gap in supply of junior secondary teachers.

D-24 Should the new course be held at the University (like the present Teachers' Certificate course), in the existing teacher training colleges, or in a separate institution? The first alternative would be expensive and might overstrain the capacity of the University. It is questionable whether the academic atmosphere of the University would in any case be the most appropriate environment for this training. Use of the three Teacher Training Colleges would have the advantage of strengthening these institutions and would help to reduce the sense of separateness which currently divides primary and secondary teachers and schools from each other. The atmosphere of the colleges, and the more classroom- and problem-oriented courses which we have recommended, would provide a more suitable grounding for the junior secondary teacher. It must also be borne in mind that we foresee that in perhaps ten years time the educational qualification for entry to primary school teaching will be at senior secondary level. The last alternative, establishing a fourth Teacher Training College to specialise in training of junior secondary teachers, would involve high capital costs, and might help to perpetuate unnecessary status differences within the teaching profession. The three existing colleges will be small institutions, even after their planned development to 300 places each is completed, and they could if necessary be further developed. It seems by no means improbable, moreover, that some of the needed places for junior secondary teachers could be found within the planned 900 places. The Commission does not favour training the new junior secondary teachers at the University. We feel that Government should consider carefully the last two alternatives: expanding the existing training colleges or building a fourth college specifically for junior secondary teachers.

Role of the Botswana Extension College

D-25 The Botswana Extension College's offerings of junior secondary education by distance teaching means can play a useful role in the transitional period. First they open up possibilities of taking junior secondary courses to those not yet within reach of a school. Second, the materials used for out-of-school instruction can also be used by day junior secondary schools to supplement and strengthen their teaching.

Public Opinion

D-26 The attitude of students, parents, employers and the community at large toward the new educational structure will be a decisive factor in easing the transition. It will be important to explain the purposes of the policy both to the wider public and to teachers, and to consult with teachers about the best ways of implementing it. The long-term goal of universal junior secondary education is highly desirable from a national point of view, but parents must also be reassured that their children will have fair opportunities for education during the transition period. It is inevitable that some places will have junior secondary facilities before others, and this makes it all the more important that each community is given an indication of the approximate date by which it may hope to have a school, and be shown how by its own efforts this date may be advanced.